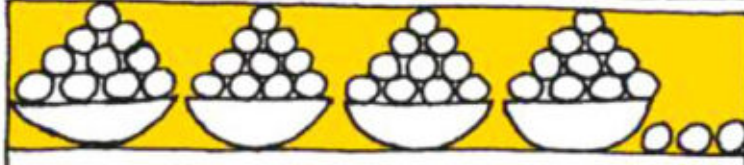


# GAMES AND ACTIVITIES

## WORKSHEETS

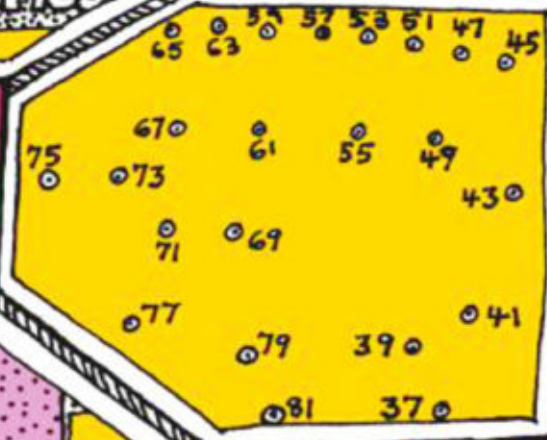
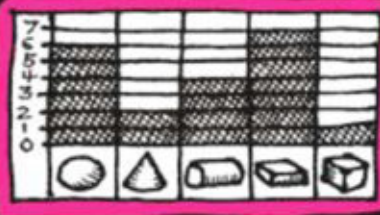
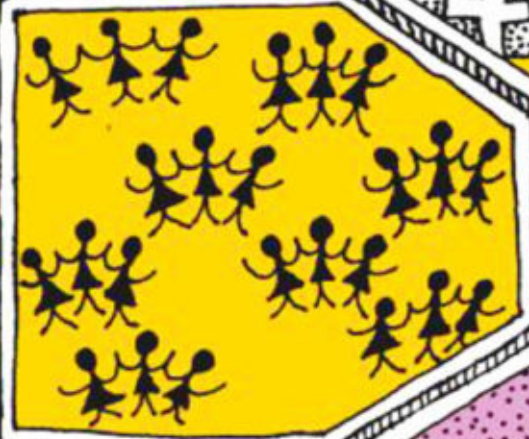


$6 = 4 + 2$

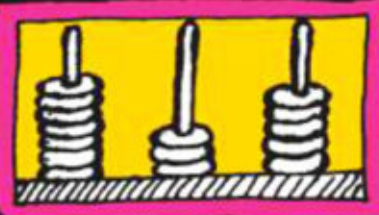


4 tens and 3 ones

8	3	4
1	5	9
6	7	2



M	T	W	T	F	S	S
1	2	3	4	5		
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



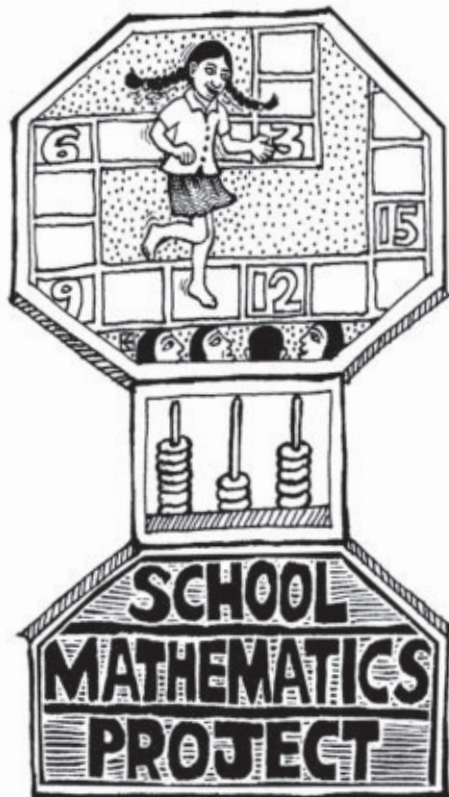
# SCHOOL MATHEMATICS PROJECT



8	12
10	15

# GAMES AND ACTIVITIES WORKSHEETS

Edited by  
Amitabha Mukherjee and Vijaya Varma



Eklavya

## Games and Activities: Worksheets

School Mathematics Project

Centre for Science Education and Communication, Delhi University (2001)

Edited by: Amitabha Mukherjee and Vijaya Varma

Illustration/Design: Karen Haydock



School Mathematics Project, July 2017

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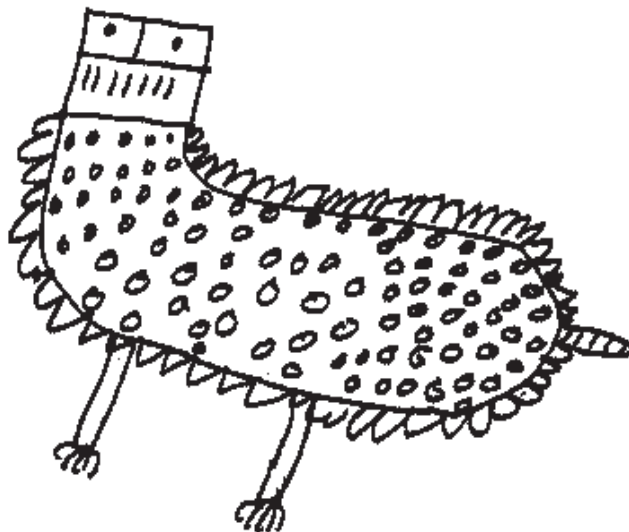
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## Preface

This is a reprint of an experimental edition of *Games and Activities for Class II: Worksheets* prepared for the School Mathematics Project (SMP) in 2001 with the help and support of teachers from participating schools. It is accompanied by the *Games and Activities for Class II: Teachers' Guide* which explains and gives ideas on how the worksheets in this book might be used, and also gives ideas for additional activities. As part of the same project, another book was written for Class I. But the games, activities and worksheets can be used for any age, depending on the needs of the students.

### About SMP

The School Mathematics Project (SMP) aimed to address the fear of mathematics in children. Based at the Centre for Science Education and Communication, University of Delhi, ran as a teaching programme in 5 schools in Delhi that began in 1995. In 2000, the first batch of children completed Class V. The project emphasised activities with concrete objects in the early stages. Algorithms were introduced later. Wherever possible, multiple ways to do the same mathematical task were introduced. Children were encouraged to work in groups, and to discuss how they solved the mathematical problems in the classroom. The following points encapsulate the 'SMP Approach':

### On Children

- Children are not blank slates when they enter school. They come equipped with a certain awareness of number and operations ('initial mathematics') that is independent of formal instruction. Disregard of this leads to the growth of fear of mathematics.
- The classroom process should not be viewed as a one-way transfer of 'knowledge' from the teacher to the taught. The emphasis should be on elucidation rather than on instruction.
- Children are individuals with their own pace and often their own strategies of learning. The curriculum should provide room for them to remain different from each other. One method, one activity, one technique can not provide for all children. There is a natural pace at which each child picks up new concepts and skills in mathematics. Riding roughshod over them in an attempt to maintain a pace of learning dictated solely by an externally imposed pre-determined curriculum is a major factor in the development of fear of mathematics.

### On Mathematics

- Mathematics is more than numbers, operations and algorithms. It encompasses shape and space, patterns, structures, data handling and measurement.
- Mathematics is inherently beautiful and a potential source of joy – but only if the teacher feels this herself can she communicate it to children.
- Aptitude comes naturally when there is a meaningful context for mathematics.

### On Teachers and Teaching

- If the teacher is not convinced of the need for change, no curricular change will work. Teacher training is not just a matter of training teachers in new concepts and techniques, but of changing their attitude to mathematics and to teaching, especially in their relationship with children. This can not be done by imposition and may be possible only through involvement and association.

- Ultimately the teacher has to transact the curriculum in the classroom. It is neither possible nor desirable to spell out exactly how everything should be done. It is nevertheless necessary to provide the teacher all possible support.
- Symbolic notation is a powerful tool for computation as well as a means of recording the results of computation. However, familiarity with the symbol for something does not imply facility with what the symbol stands for.

The worksheets, naturally, do not capture everything that was done in the classroom. We suggest, therefore, that teachers who wish to use these in their classrooms adapt the worksheets to suit their specific needs.

Please note that each worksheet carries a legend at the bottom right hand corner of the page. The legend starts off by specifying the type of worksheet, eg, whether it has to do with money, time, etc. Each type of worksheet has a unique number. The final element of the legend identifies the number of the worksheet, which runs from WS 1 to WS 63. Use these numbers to find the page of the *Teachers' Guide* which corresponds to a particular worksheet.

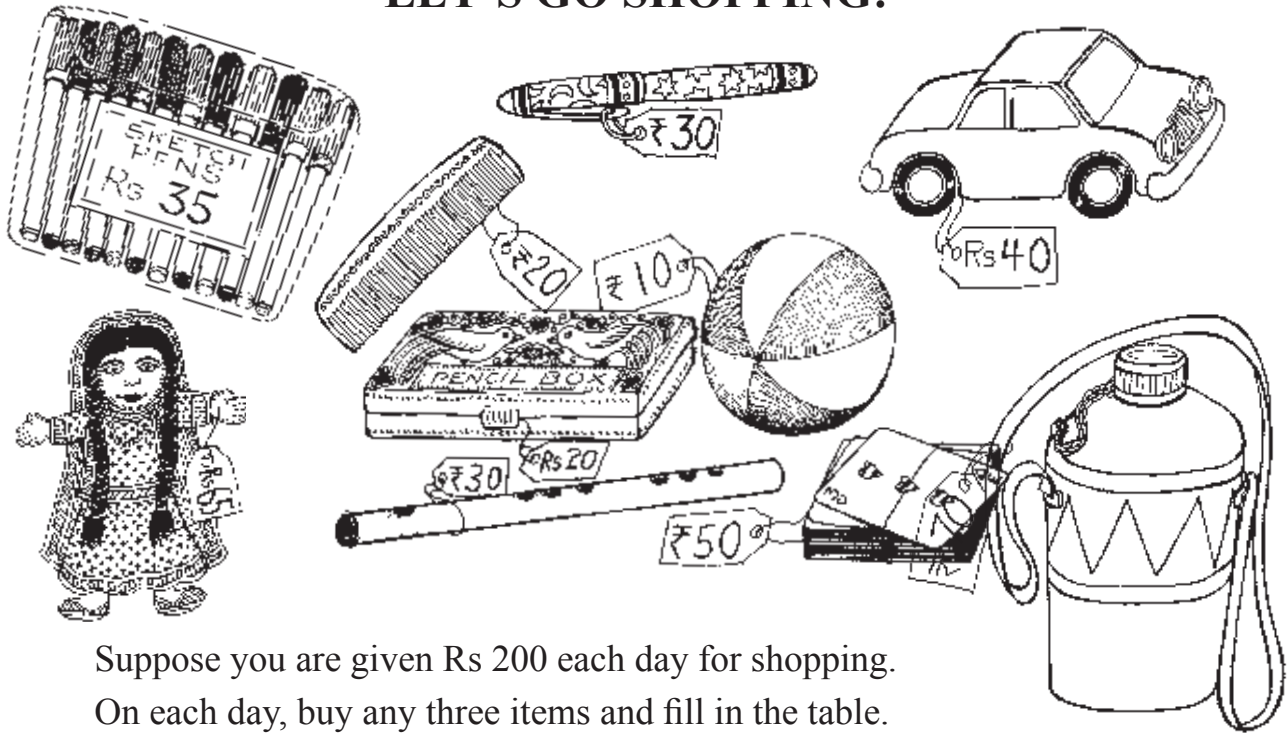
Amitabha Mukherjee  
 Vijaya Varma  
 for the SMP Group

Please send any feedback and suggestions for modification to Karen Haydock (who illustrated and designed this book) at [haydock@gmail.com](mailto:haydock@gmail.com).

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MONEY.....	1
TIME (including date).....	7
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SHAPE.....	13
NUMBER.....	17
ADDSUB (addition and subtraction) .....	32
MULTDIV (multiplication and division) .....	44
FRAC (fractions).....	55

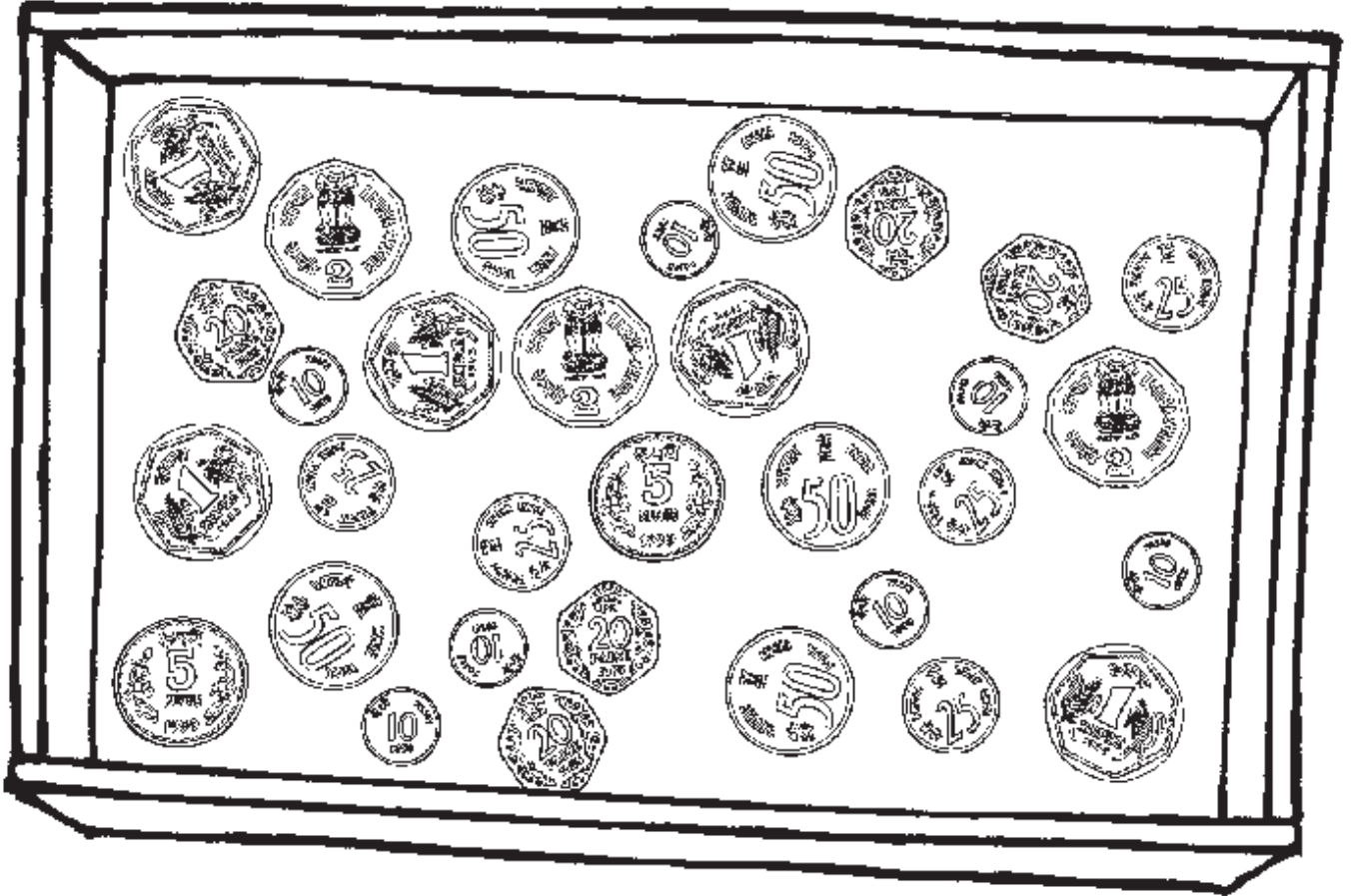
## LET'S GO SHOPPING!



Suppose you are given Rs 200 each day for shopping.  
On each day, buy any three items and fill in the table.

DAY	ITEM NAME	AMOUNT	AMOUNT LEFT FROM Rs 200
<b>1</b>	1		
	2		
	3		
			<b>TOTAL =</b>
<b>2</b>	1		
	2		
	3		
			<b>TOTAL =</b>
<b>3</b>	1		
	2		
	3		
			<b>TOTAL =</b>

## A TRAY OF OLD COINS




How many coins of each kind are there? How much are they worth?

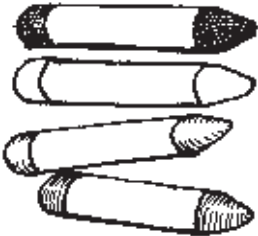
<input style="width: 40px; height: 25px;" type="text"/>	x	5 p coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	10 p coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	20 p coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	25 p coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	50 p coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	Re 1 coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	Rs 2 coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise
<input style="width: 40px; height: 25px;" type="text"/>	x	Rs 5 coin	=	<input style="width: 40px; height: 25px;" type="text"/>	Rupees	<input style="width: 40px; height: 25px;" type="text"/>	paise

## HOW MANY CAN YOU BUY?

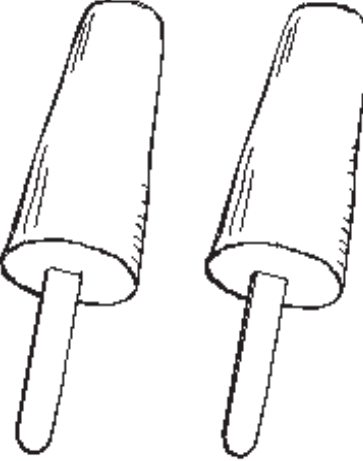
Circle the number of things in each box that you can buy with 10 Rupees.



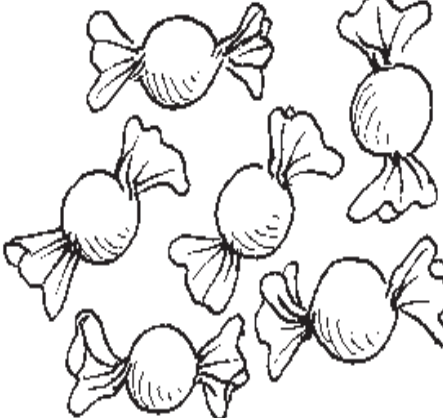
Balls  
Rs 5 each



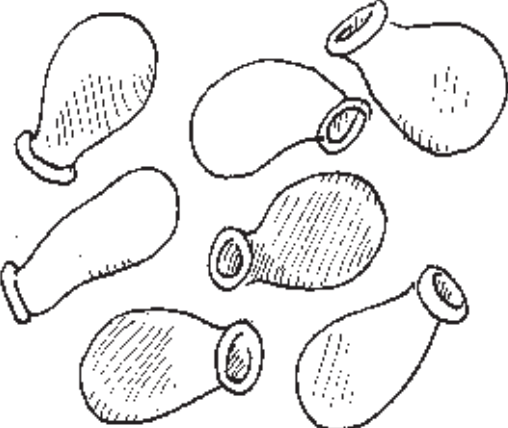
Crayons  
2 for Rs 5




Kulfi  
Rs 10 each



Toffees 2 for Rs 5



Balloons 3 for Rs 5



Crackers Rs 2 each

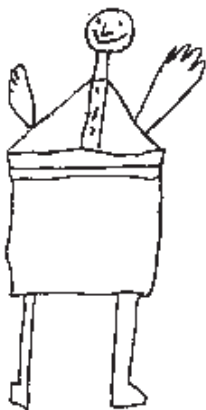


Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## PRICES OF THINGS

Visit a shop and note down the prices of any 10 things you might like to buy.

	NAME OF THING	PRICE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



## WHO BOUGHT WHAT?

Gita, Farha, Shilpa and Shruti each bought 1 jumper and 1 pair of shorts.

Gita spent Rs 380.

Farha spent Rs 400.

Shilpa spent Rs 560.

Shruti spent Rs 210.

Work out which jumper and which pair of shorts each girl bought.



Write how much they spent in the table below.

Name of Girl	Cost of Jumper	Cost of Shorts	Total Cost
<b>Gita</b>			<b>380</b>
<b>Farha</b>			<b>400</b>
<b>Shilpa</b>			<b>560</b>
<b>Shruti</b>			<b>210</b>

## HOW MANY COINS IN A RUPEE?

Is there any short form for writing Rupees and Paise?



Yes! 10 paise can be written as 10 p.  
5 rupees can be written as Rs 5 or ₹5  
and 1 rupee can be written as Re 1 or ₹1.



How many paise make a rupee?



That's easy!  
100 p = Re 1



1. How many 10 p coins in a Rupee?

$$\textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10} + \textcircled{10}$$

$$\boxed{10} \times 10 \text{ p} = \boxed{\quad} \text{ p}$$

2. How many 20 p coins in a Rupee? (Draw and write.)

$$\boxed{\quad} \times 20 \text{ p} = \boxed{\quad} \text{ p}$$

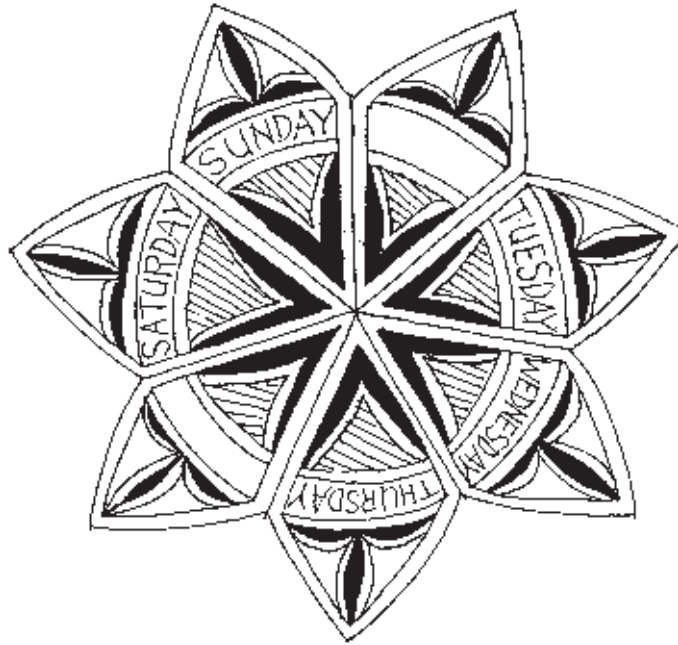
3. How many 25 p coins in a Rupee?

$$\boxed{\quad} \times 25 \text{ p} = \boxed{\quad} \text{ p}$$

4. How many 50 p coins in a Rupee?

$$\boxed{\quad} \times 50 \text{ p} = \boxed{\quad} \text{ p}$$

## DAYS OF THE WEEK



1. Fill in the missing days of the week in the above picture.
2. Which day of the week is it today? (tick one)
  - a. Monday
  - b. Tuesday
  - c. Wednesday
  - d. Thursday
  - e. Friday
  - f. Saturday
  - g. Sunday
3. Which day of the week is always a holiday? \_\_\_\_\_
4. Which day comes after Wednesday? \_\_\_\_\_
5. Which day comes before Saturday? \_\_\_\_\_
6. The day before Thursday is \_\_\_\_\_.
7. There are \_\_\_\_\_ days in two weeks.
8. There are \_\_\_\_\_ days in three weeks.
9. My favourite day of the week is \_\_\_\_\_.

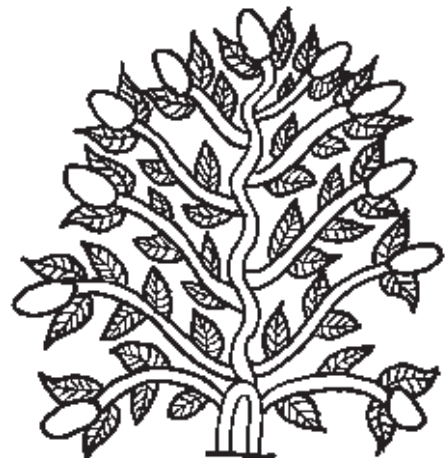
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## MAKE A CALENDAR

Suppose this month has 31 days. Complete the calendar.

MON	TUE	WED	THU	FRI	SAT	SUN
	1	2	3			
7						
	15					
					26	

1. What is the second Saturday? \_\_\_\_\_
2. What is the first Wednesday? \_\_\_\_\_
3. What is the last Friday in the month? \_\_\_\_\_
4. What is the second Monday? \_\_\_\_\_
5. What is the third Friday? \_\_\_\_\_
6. Is the 21st a Sunday? \_\_\_\_\_
7. Is the 18th a Friday? \_\_\_\_\_
8. Is the 12th a Tuesday? \_\_\_\_\_



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## 2018 CALENDAR

January							February							March							April						
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7				1	2	3	4				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28					26	27	28	29	30	31		23	24	25	26	27	28	29
																					30						

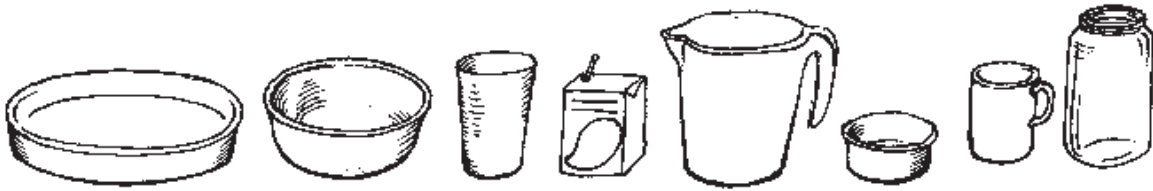
May							June							July							August						
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6					1	2	3							1			1	2	3	4	5
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30	31		
														30	31												

September							October							November							December						
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2	1	2	3	4	5	6	7				1	2	3	4						1	2
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
																					31						

1. Is 23rd April a Monday or a Sunday in 2018? \_\_\_\_\_
2. On which day of the week does Gandhi Jayanti (October 2) fall in 2018? \_\_\_\_\_
3. My birthday is in the month of \_\_\_\_\_.
4. February has 28 days except in a leap year when it has 29 days.  
Is 2018 a leap year? \_\_\_\_\_
5. My summer holidays are in the months of \_\_\_\_\_.
6. On which day of the week does Independence Day (August 15) fall? \_\_\_\_\_
7. The fifth month of the year is \_\_\_\_\_.
8. The tenth month of the year is \_\_\_\_\_.
9. August is the \_\_\_\_\_ month of the year.
10. A month has \_\_\_\_\_ weeks.
11. These months have 31 days: \_\_\_\_\_.

## VOLUME



Take six to eight containers of different sizes and shapes.  
Label each one with a different number.

### 1. Guess

Look at your containers and guess the answers to these questions:

Which one will hold the most water?

Which one will hold the least water?

Arrange the containers in order from the one that will hold the most to the one that will hold the least. Write the numbers here:

--	--	--	--	--	--	--	--

### 2. Test

Now use water to find out:

Which one really held the most water?

Which one really held the least water?

Arrange the containers in order from the one that really held the most to the one that held the least. Write the numbers here:

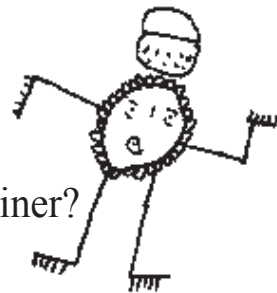
--	--	--	--	--	--	--	--

### 3. Think

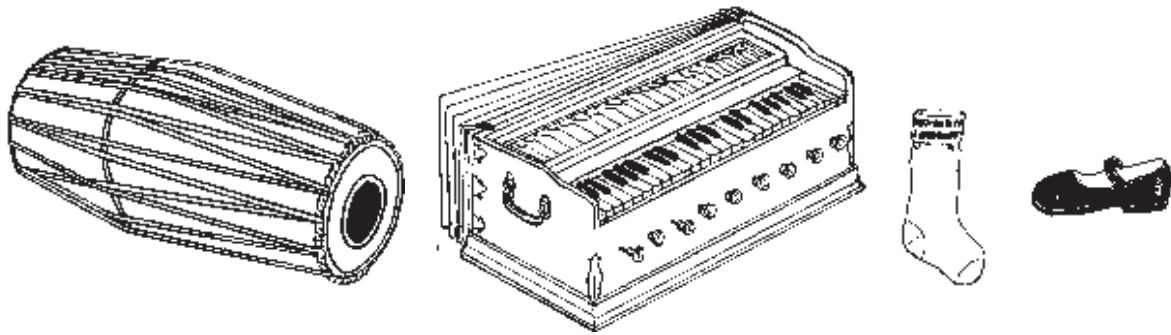
Is the tallest container the one that holds the most?

Is the shortest container the one that holds the least?

Can you find a tall container that holds less than a shorter container?

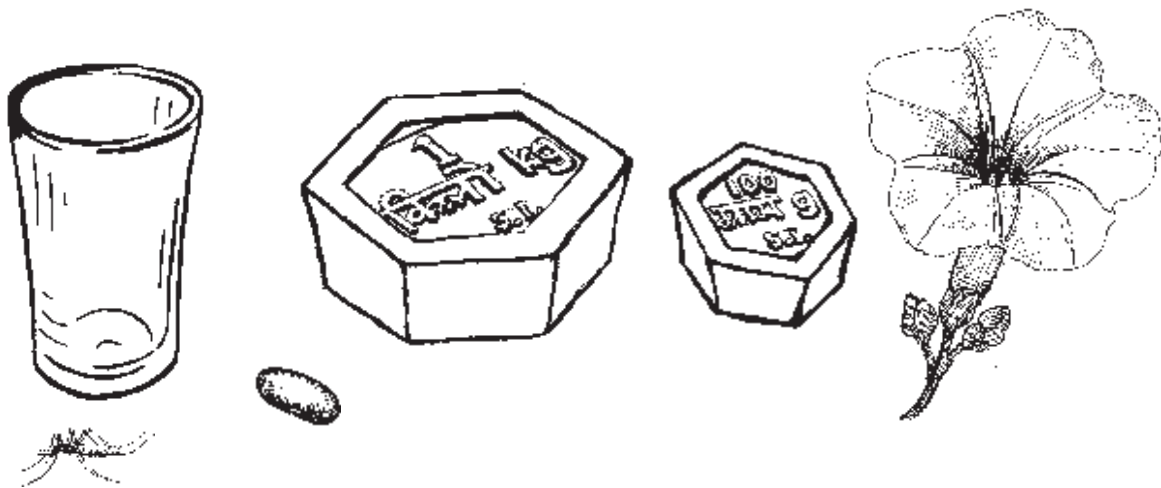


## LIGHTER AND HEAVIER



**Which is heavier:**

- (1) the harmonium or the dholak?
- (2) the shoe or the sock?
- (3) the dholak or the shoe?



**Which is lighter?**

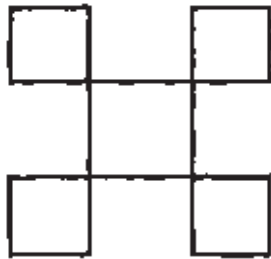
- (4) the bean or the 1 kg weight?
- (5) the empty glass or the bean?
- (6) the 1 kg weight or the 100 g weight?
- (7) the bean or the mosquito?
- (8) the empty glass or the 1 kg weight?
- (9) the flower or the bean?
- (10) the flower or the 100 g weight?



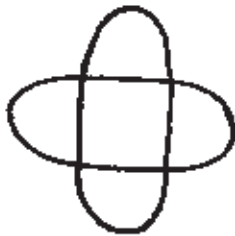
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## CAN YOU DRAW IT?

1. Can you draw this **without** lifting your pencil?

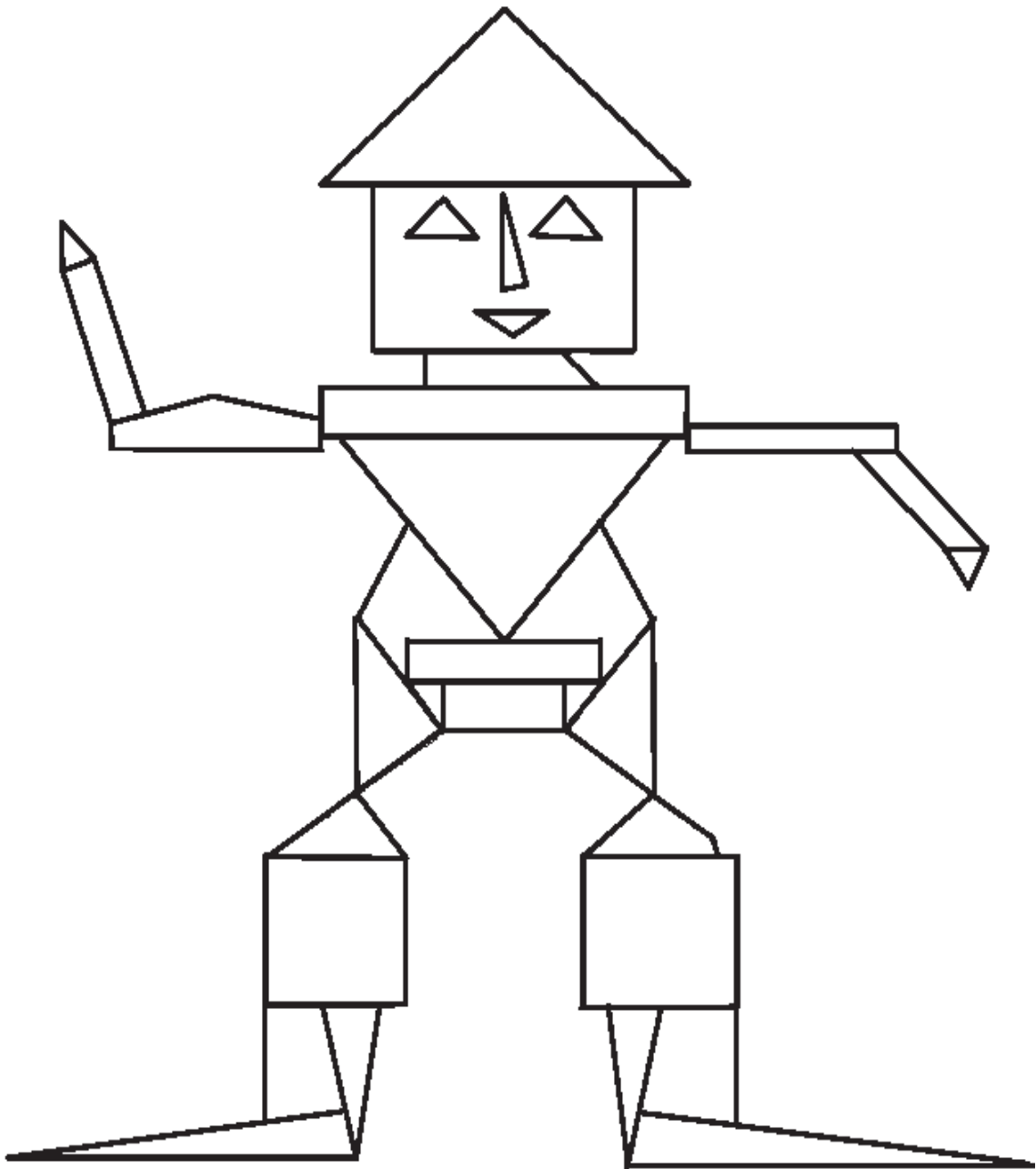


2. How about these?



3. Draw any other figures you like without lifting your pencil even once.

## SHAPES



Find out how many triangles and rectangles the robot is made of.

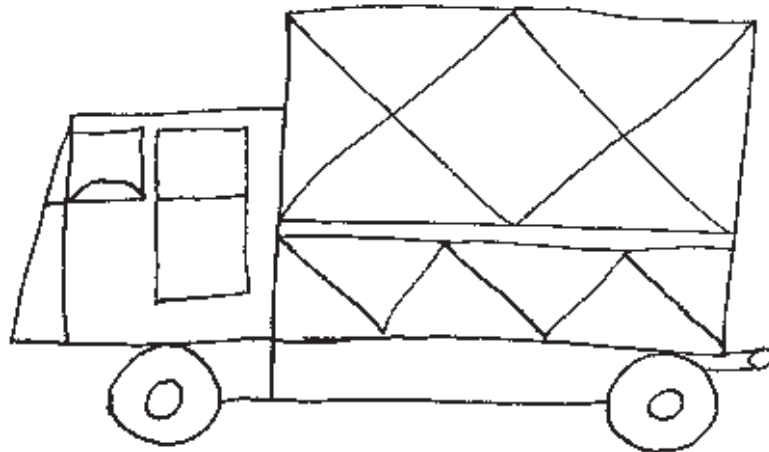
Colour the triangles red.

Colour the rectangles blue.

Number of triangles =

Number of rectangles =

## PICTURES AND SHAPES



1. Count the number of triangles, rectangles and circles in the truck.

Number of triangles =

Number of rectangles =



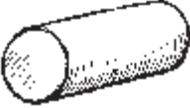

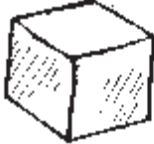
Number of circles =

2. Draw your own pictures using these shapes.

## WHAT SHAPE IS IT?

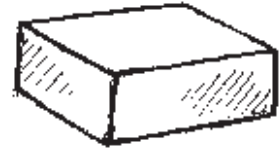
Look at each object in the picture and decide which shape it is. For each object, shade a box in the graph below. For example, there is only one object that is like a sphere, so we have shaded only the bottom box in the column marked 'sphere'.



8					
7					
6					
5					
4					
3					
2					
1					
0	Sphere 	Cone 	Cylinder 	Cuboid 	Cube 

## SHAPES OF OBJECTS

Name at least five objects that are cuboidal in shape.



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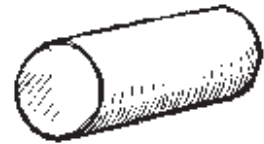
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Name at least five objects that are cylindrical in shape.



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## THE NUMBER GAME

This animal can do something you can't do. What animal is it?  
 To find out, draw straight lines to join the dots from 21 to 52.



Now draw straight lines connecting all the dots with even numbers.  
 Join up in order, from 2 to 38.



What have you drawn?

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## COLOUR THE BOXES IN THE GRID

Box 4 has been shaded.

Now you colour these boxes:

**12, 35, 49, 53, 69, 71, 84, 93**




Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## JOIN THE NUMBERS

Join the numbers in increasing order.

334  
201

321

301

231

325

Now make your own JOIN THE NUMBERS on the back and give it to a friend to do.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## WHICH ONE IS IT?

**1 2 3 4 5 6 7 8 9**

Fill in the blanks with ordinal numbers:

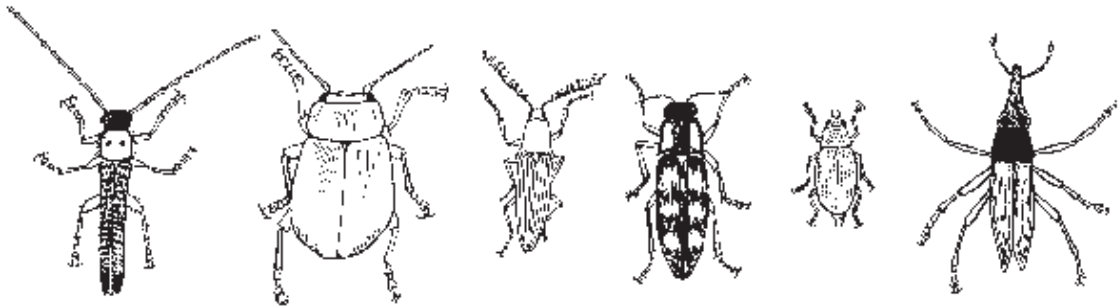
9 is the ninth number.

4 is the \_\_\_\_\_ number.

7 is the \_\_\_\_\_ number.

3 is the \_\_\_\_\_ number.

1 is the \_\_\_\_\_ number.



The first beetle has two black spots on its thorax.

The \_\_\_\_\_ beetle is smallest.

The \_\_\_\_\_ beetle is biggest.

The \_\_\_\_\_ beetle has the longest antennae.

The \_\_\_\_\_ beetle has a black thorax.

The \_\_\_\_\_ beetle has six white spots on its abdomen.



## WRITE MY NAME

7	8	5	3	4	8	6	7	5
4	2	0	4	0	1	2	1	8
3	3	5	6	3	2	0	2	3
4	1	7	8	7	2	9	5	4
6	2	7	4	2	0	8	1	3
7	8	5	1	9	4	0	5	2

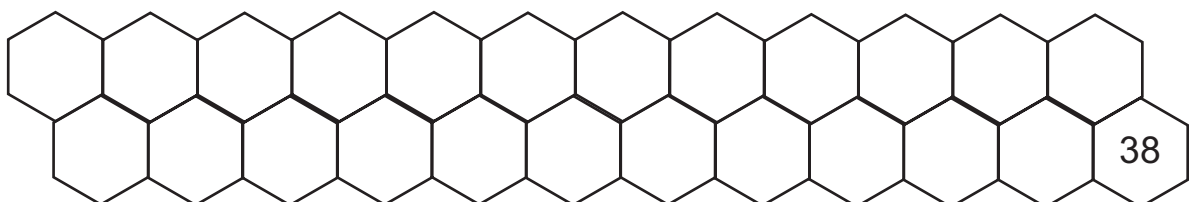
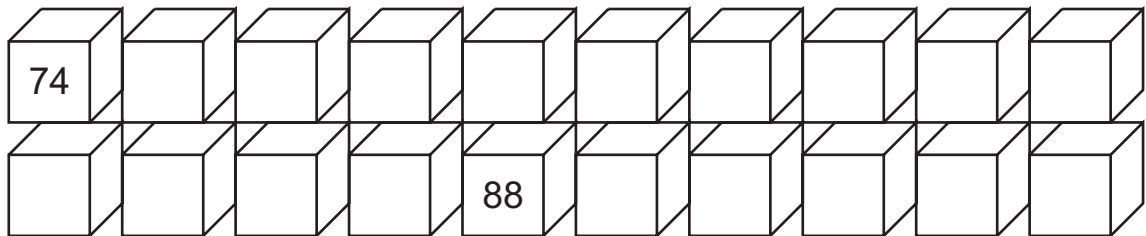
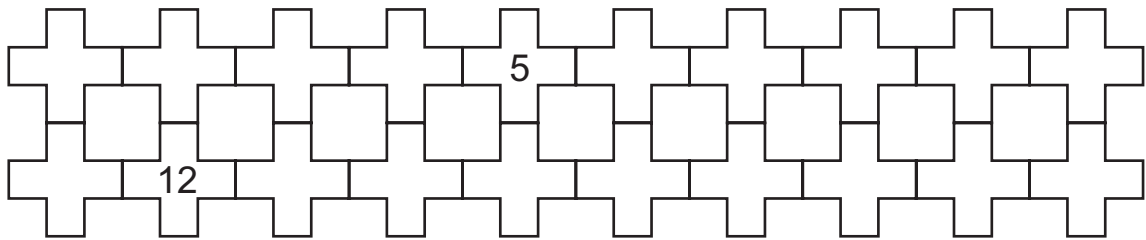
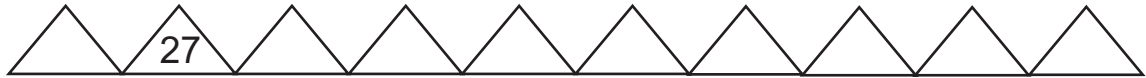
Circle the following numbers in the above chart and write their number names.

The first one is already done for you.

Number	Number Name
48	<i>forty eight</i>
32	
78	
18	
33	
40	
27	
54	
19	

## NUMBERS IN SERIES

Fill in numbers to complete each sequence.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## THE ODD ONE OUT

1. Read out loud the numbers in each row.

<b>107</b>	<b>139</b>	<b>106</b>	<b>101</b>	<b>108</b>
<b>148</b>	<b>141</b>	<b>143</b>	<b>130</b>	<b>144</b>
<b>110</b>	<b>126</b>	<b>130</b>	<b>155</b>	<b>150</b>
<b>124</b>	<b>136</b>	<b>149</b>	<b>116</b>	<b>107</b>
<b>100</b>	<b>300</b>	<b>700</b>	<b>4000</b>	<b>800</b>

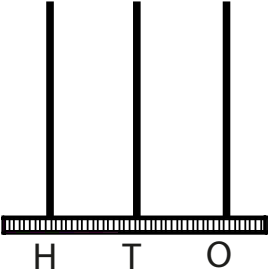
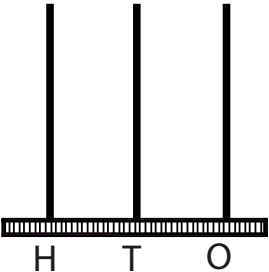
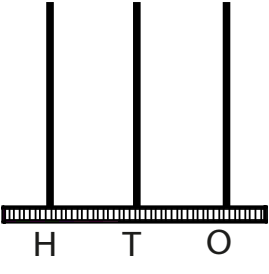
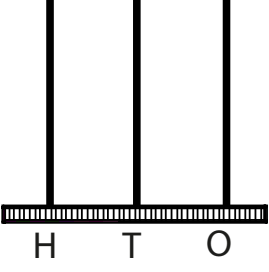
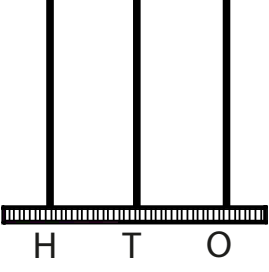
2. Circle the odd one out in each row.

3. Colour the smallest number in each row red.

4. Colour the largest number in each row blue.

## CHART YOUR NUMBERS

Complete the table for the numbers shown.

Number	Abacus	Place Value		
		Hundreds	Tens	Ones
51				
510				
105				
150				
15				

## WHAT IS ITS VALUE?

Suppose letters have the following values:

A = 1	G = 7	M = 3	S = 9	Y = 5
B = 2	H = 8	N = 4	T = 10	Z = 6
C = 3	I = 9	O = 5	U = 1	
D = 4	J = 10	P = 6	V = 2	
E = 5	K = 1	Q = 7	W = 3	
F = 6	L = 2	R = 8	X = 4	



Farida has some toys. Find out their values.



$$\text{DOG} = 4 + 5 + 7 = \boxed{\phantom{00}}$$



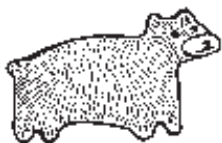
$$\text{CAT} = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\text{CAR} = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\text{BUS} = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\text{BEAR} = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\text{FISH} = \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

## SKIP COUNTING!

Count in twos: (Circle every second number.)

1 (2) 3 (4) 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in threes: (Circle every third number.)

1 2 (3) 4 5 (6) 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in fours: (Circle every fourth number.)

1 2 3 (4) 5 6 7 (8) 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in fives: (Circle every fifth number.)

1 2 3 4 (5) 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in sixes: (Circle every \_\_\_\_\_ number.)

1 2 3 4 5 (6) 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in sevens: (Circle every \_\_\_\_\_ number.)

1 2 3 4 5 6 (7) 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in eights: (Circle every \_\_\_\_\_ number.)

1 2 3 4 5 6 7 (8) 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in nines: (Circle every \_\_\_\_\_ number.)

1 2 3 4 5 6 7 8 (9) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in tens: (Circle every \_\_\_\_\_ number.)

1 2 3 4 5 6 7 8 9 (10) 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Count in tens, starting from 27:

(27) 28 29 30 31 32 33 34 35 36 (37) 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58

Count in threes, starting from 22:

(22) 23 24 (25) 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

Count in sixes, starting from 27:

(27) 28 29 30 31 32 (33) 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58

Count in \_\_\_\_\_, starting from \_\_\_\_\_:

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## ARRANGE THE NUMBERS



Put the numbers in increasing order:

(a) 143, 256, 98, 320, 194, 279

(b) 421, 356, 168, 200, 450, 349

(c) 288, 153, 67, 192, 431, 120

Put the numbers in decreasing order:

(d) 241, 183, 432, 376, 94, 203

(e) 350, 488, 99, 145, 264, 333

(f) 444, 434, 498, 343, 243, 93



## COMPARE US

Write the correct symbol  $>$ ,  $<$ , or  $=$  in each box:

153  148

423  490

460  380

157  183

500  468

297  490

224  268

483  593

444  471

237  333

300  299

332  345

198  176

205  250

327  398

276  420

245  445

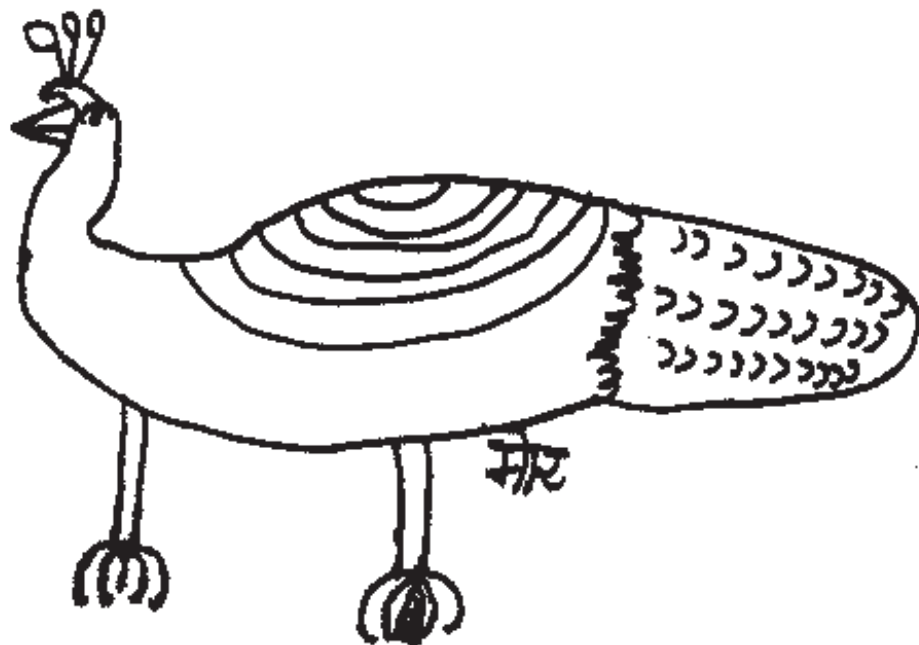
364   $(346 + 8)$

417  421

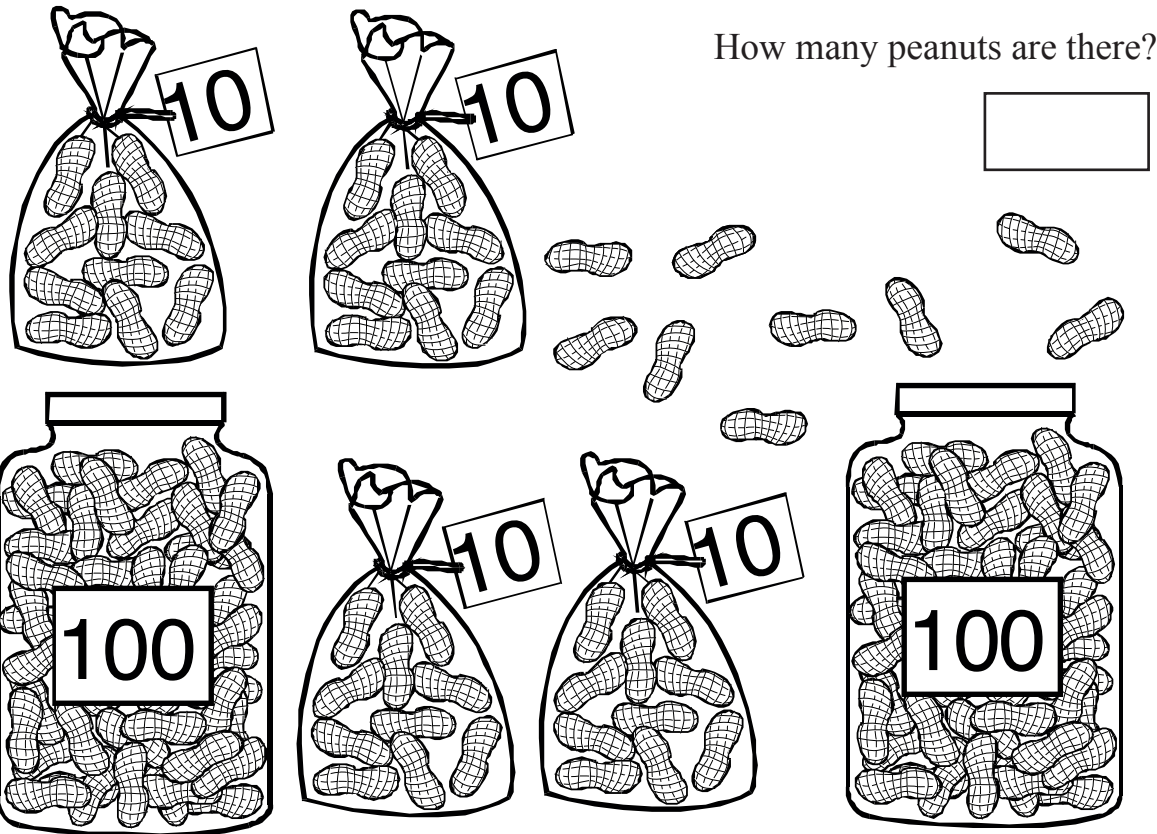
160   $(105 + 55)$

410  310

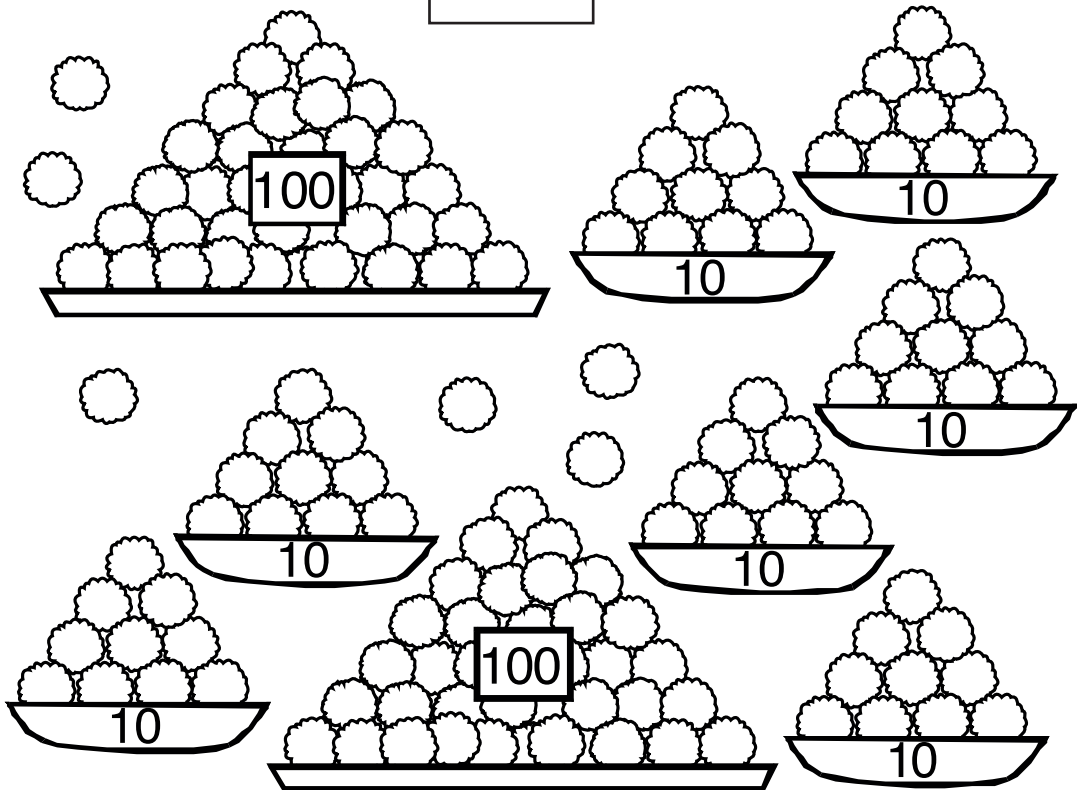
500   $(499 + 1)$



## HOW MANY?



How many laddus are there?



**EXPAND THE NUMBER**

Write each number in expanded form. The first one is done for you.

$$937 = \underline{9 \text{ hundreds}} + \underline{3 \text{ tens}} + \underline{7 \text{ ones}}$$

(a)  $781 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(b)  $146 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(c)  $356 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(d)  $164 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(e)  $362 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

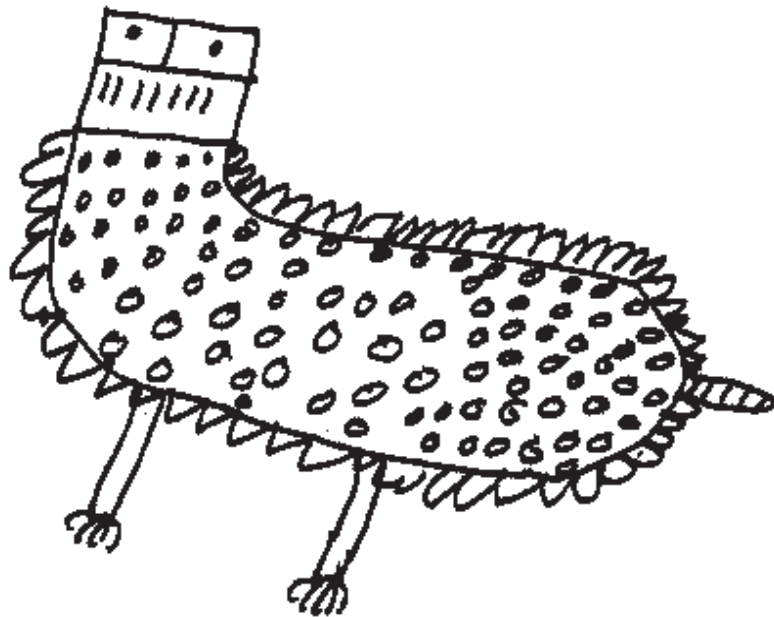
(f)  $930 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(g)  $276 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(h)  $571 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(i)  $403 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

(j)  $82 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## DO YOU REMEMBER OUR NAMES?

These large numbers have forgotten their names.

Can you write the number names?



## ADDITION

Add the matchsticks. Make a ring around new sets of 10 matchsticks.

T	O
4	7
2	5

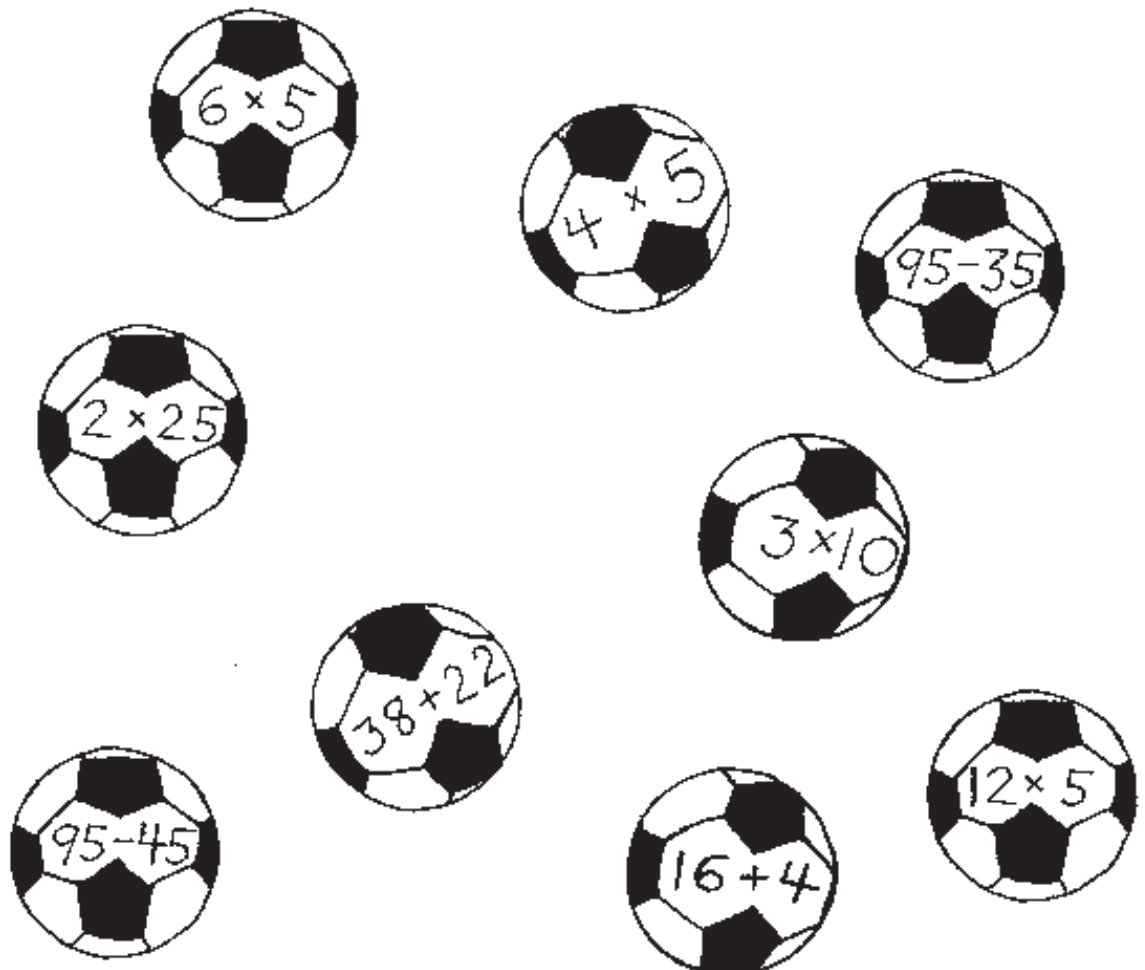
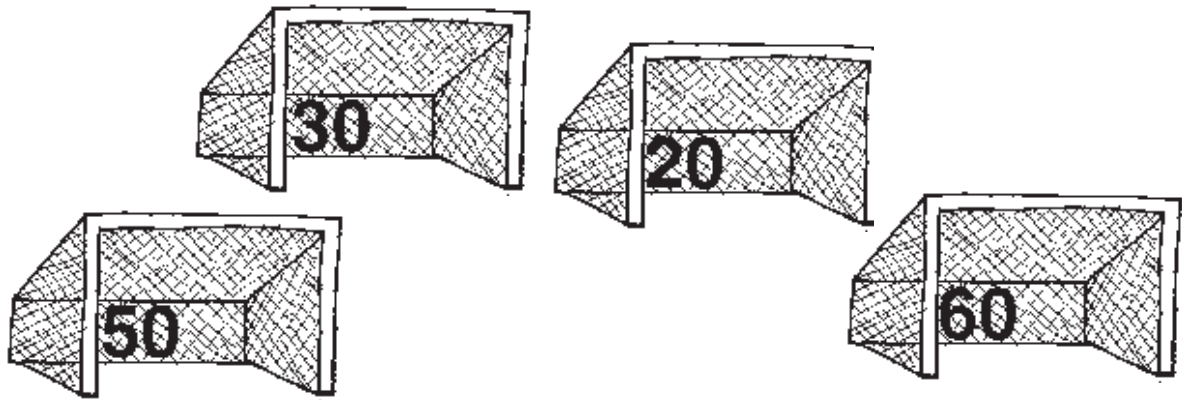
T	O

T	O

T	O

## WHERE WILL THE BALLS GO?

Draw lines to match the balls and the goals.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## COLOUR THE PICTURE

Solve the sums to find which colours to use.

KEY:

26	RED
27	BLUE
28	YELLOW
29	ORANGE

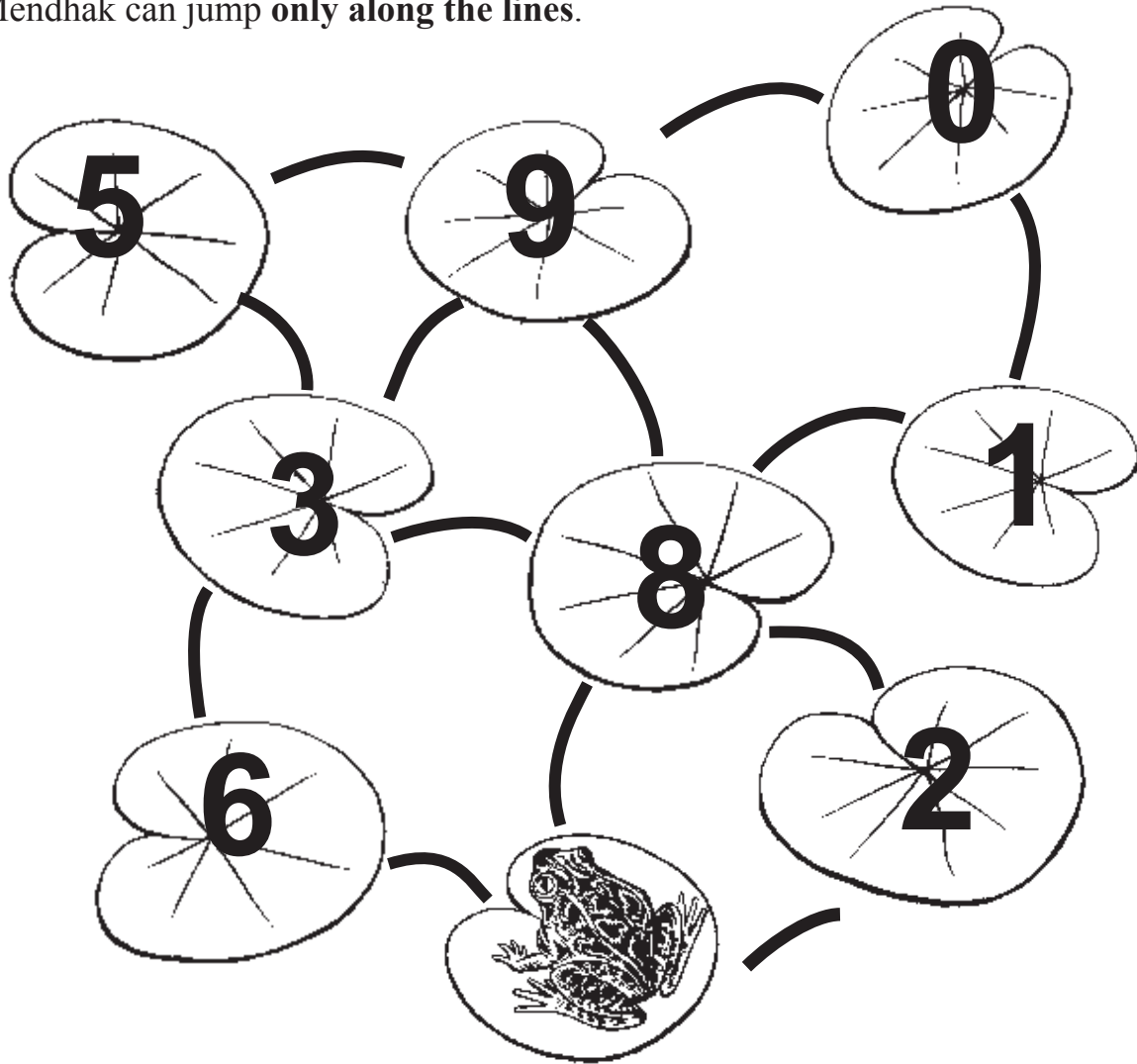
$26 + 1$   
 $15 + 12$   
 $12 + 15 =$   
 $21 + 6$   
 $14 + 13$   
 $18 + 10$   
 $14 + 14$   
 $12 + 15$   
 $13 + 14$   
 $16 + 10 =$   
 $19 + 10 =$   
 $21 + 8 =$   
 $17 + 10 =$   
 $13 + 4$   
 $18 + 9$   
 $13 + 15$   
 $14 + 15$   
 $11 + 18$   
 $16 + 11$   
 $21 + 6$   
 $24 + 3$   
 $22 + 7$   
 $13 + 16$   
 $15 + 12$   
 $12 + 15$   
 $13 + 13$   
 $11 + 16$   
 $10 + 17 =$

## MENDHAK

Mendhak jumps from one lotus leaf to another.

As she jumps she adds up the numbers on the leaves.

Mendhak can jump **only along the lines**.



This is a path Mendhak can follow to get 18:

$$8 + 1 + 9 = 18$$

(1) What path can Mendhak follow to get 20?

$$\square + \square + \square = 20$$

(2) What path can Mendhak follow to get 14?

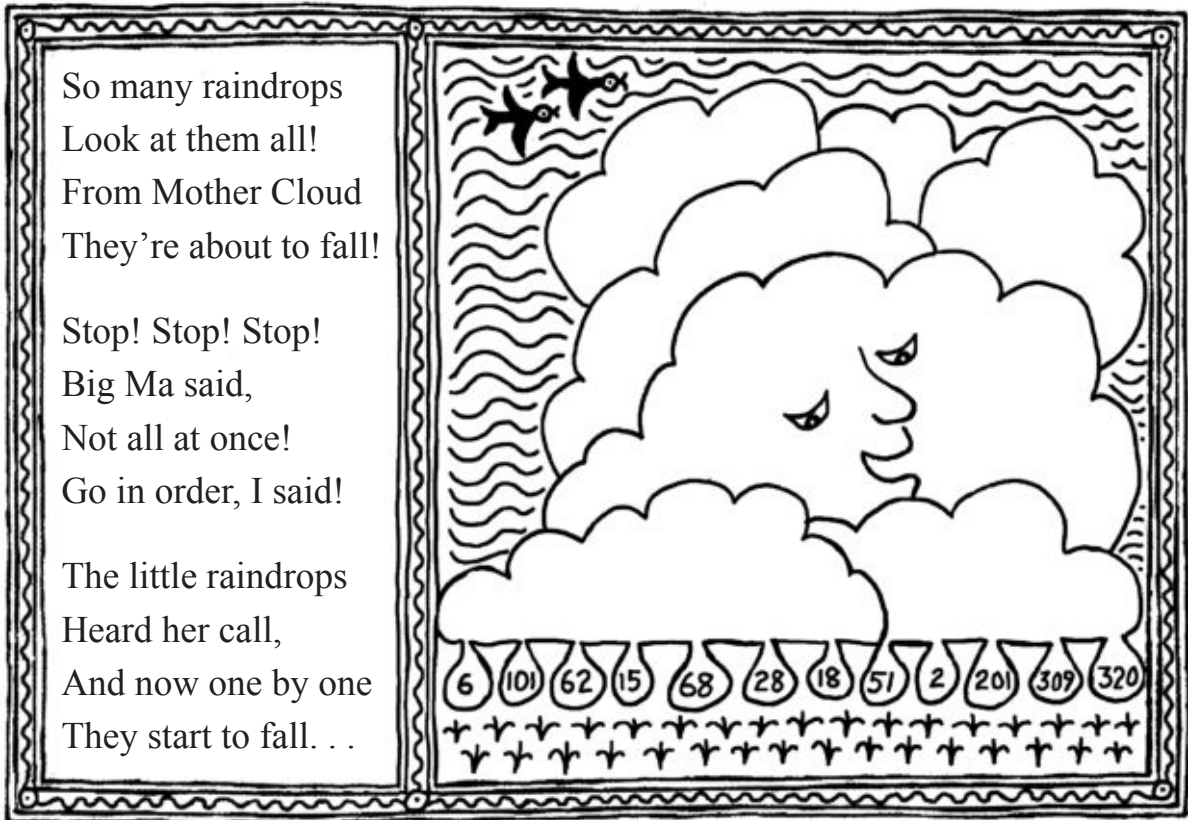
$$\square + \square + \square = 14$$

(3) What path can Mendhak follow to get 12?

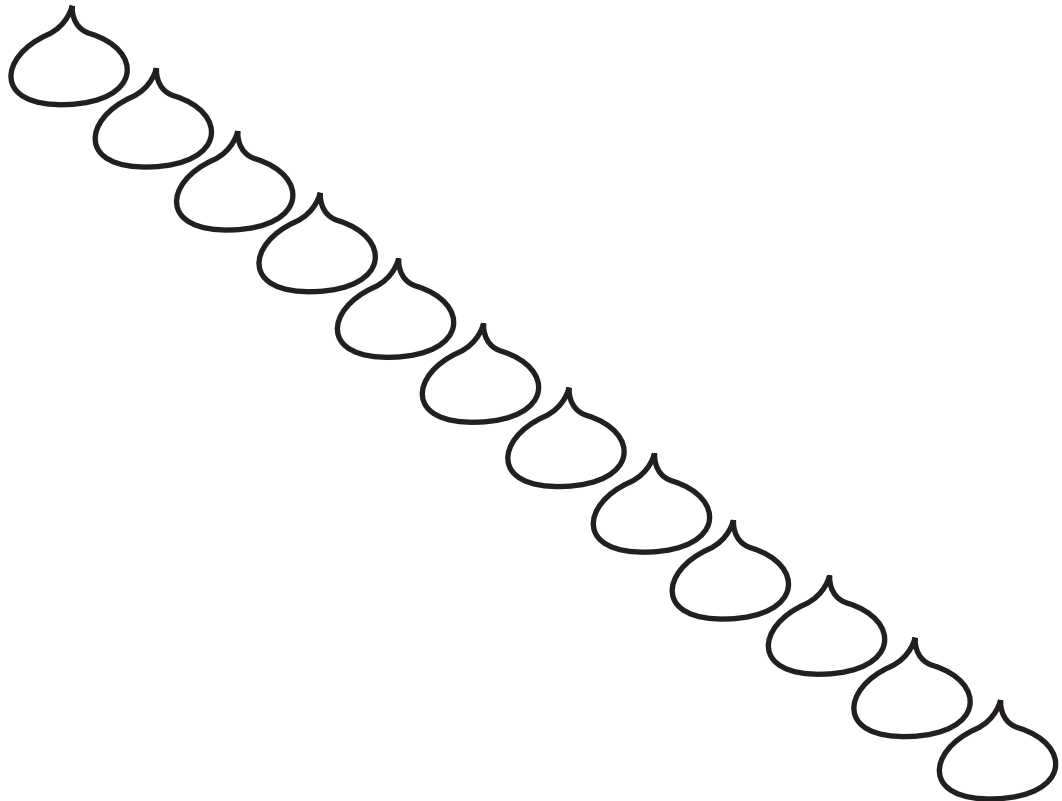
$$\square + \square + \square = 12$$



## LITTLE RAINDROPS



Arrange the numbers in the raindrops in increasing order.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

# I WILL EAT NUMBERS

Write the missing numbers.



## SOLVE PROBLEMS ON MY BACK

Solve the following problems:



**COMPUTE LIKE A COMPUTER**

Do the following sums in your mind:

$(3 + 6) - 5 = \square$

$(3 + \square) + 5 = 16$

$(11 + 5) - 3 = \square$

$(12 - \square) + 2 = 9$

$(5 + 9) - 3 = \square$

$(13 - \square) + 3 = 11$

$(7 - 2) + 6 = \square$

$(7 - \square) - 4 = 2$

$(16 - 4) + 4 = \square$

$(5 + 3) + \square = 13$

$(6 - 1) + 6 = \square$

$(10 + 5) + \square = 20$

$(13 - 2) - 7 = \square$

$(8 + 3) + \square = 17$

$(20 - 4) - 3 = \square$

$(\square + 7) + 8 = 18$

$(\square + 6) + 5 = 13$

$(11 + 2) - 3 = \square$

$(\square + 3) + 11 = 20$

$(13 - 6) + \square = 14$

$(\square + 4) + 3 = 14$

$(17 + 3) - 5 = \square$

$(6 + \square) + 3 = 11$



## MAKE SUMS

Draw rings to show how to make different sums. Write the sums.



$$7 + 5 = 12$$



$$\square + \square = 12$$



$$\square + \square = 12$$



$$\square + \square = 12$$



$$\square + \square = 15$$



$$\square + \square = 15$$



$$\square + \square = 15$$



$$\square + \square = 15$$



$$\square + \square = 15$$

Now choose whatever sums you want. Draw and write them on the back.

## MAGIC SQUARES

The four numbers across each row add up to 34.

The four numbers down each column add up to 34.

For example,  $1 + 8 + 13 + 12 = 34$

and,  $1 + \square + 4 + 15 = 34$ .

**Can you fill in the missing numbers?**

<b>1</b>	<b>8</b>	<b>13</b>	<b>12</b>
	<b>11</b>		<b>7</b>
<b>4</b>		<b>16</b>	
<b>15</b>			<b>6</b>

### Another Magic Square

This time the four numbers across each row add up to 65.

The four numbers down each column add up to 65.

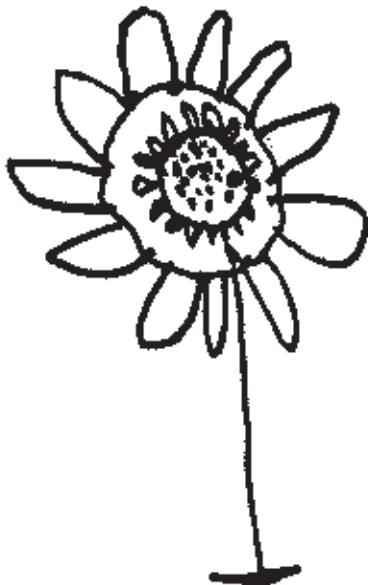
<b>12</b>	<b>13</b>		<b>1</b>
	<b>3</b>		<b>15</b>
<b>7</b>		<b>11</b>	
	<b>16</b>	<b>5</b>	

## SUM PUZZLES

Fill in the blanks:

40	-	30	=	
-		-		+
	+	10	=	30
=		=		=
20	+		=	

33		26	=	59
+				+
	-		=	41
=		=		=
	+	15	=	



	+	4	=	
+		+		+
41	+		=	
=		=		=
56			=	72

## WHAT IS THE QUESTION?

Using the operations +, - and x, find five ways to get each **answer**.

For example, if the **answer** is **40**, you can write

$$\boxed{45} \ominus \boxed{5} = 40$$

### 50

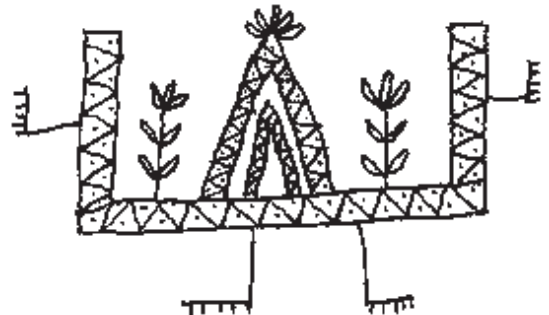
- (1)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 50$   
 (2)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 50$   
 (3)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 50$   
 (4)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 50$   
 (5)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 50$

### 48

- (1)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 48$   
 (2)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 48$   
 (3)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 48$   
 (4)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 48$   
 (5)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 48$

### 72

- (1)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 72$   
 (2)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 72$   
 (3)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 72$   
 (4)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 72$   
 (5)  $\boxed{\phantom{00}} \circ \boxed{\phantom{00}} = 72$

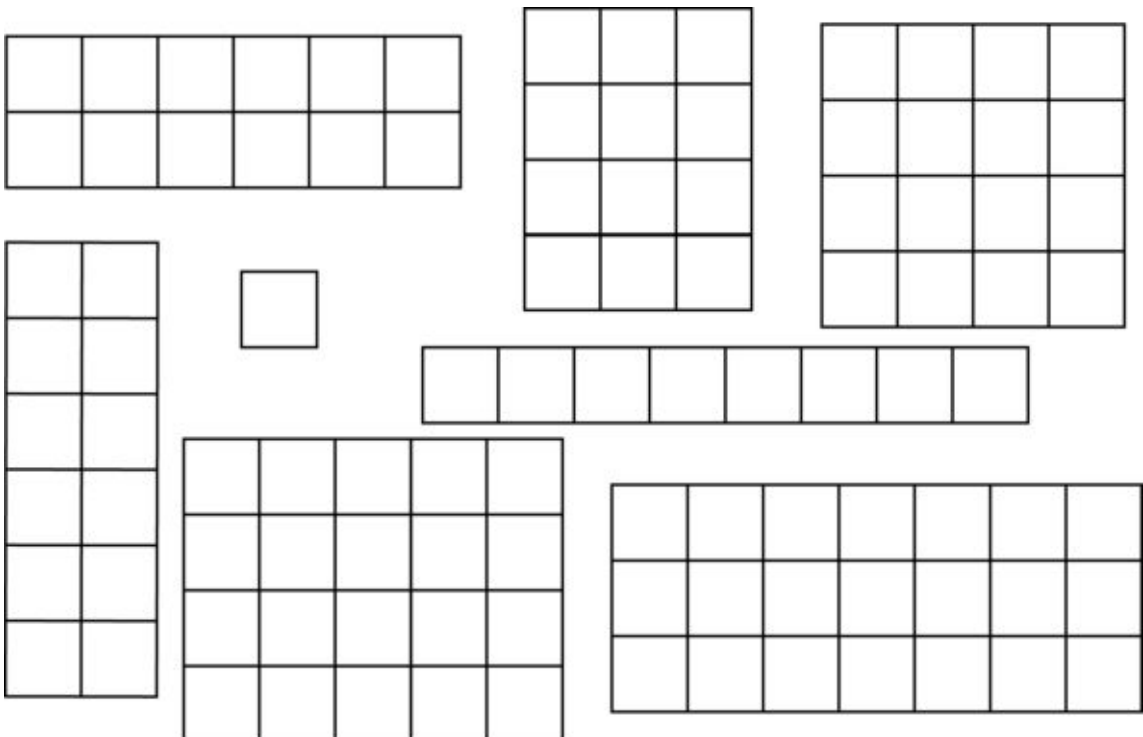




## MULTIPLICATION PICTURES

Find the picture of each multiplication, colour it according to the given code, and fill in the blanks.

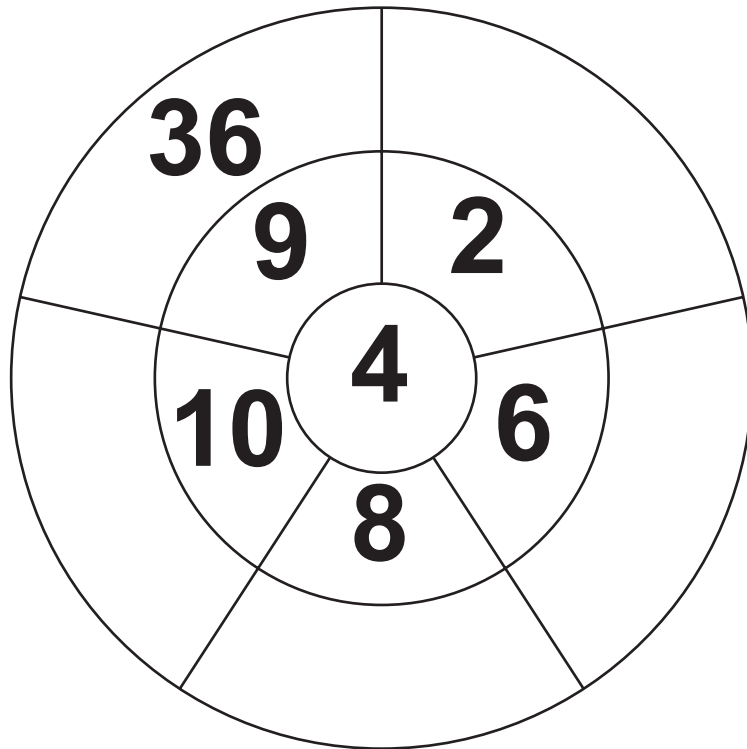
Rows		Columns		Total boxes	Colour
1	x	1	=	<input type="text"/>	Black
1	x	8	=	<input type="text"/>	Brown
4	x	5	=	<input type="text"/>	Red
3	x	7	=	<input type="text"/>	Yellow
2	x	6	=	<input type="text"/>	Green
4	x	4	=	<input type="text"/>	Blue
6	x	2	=	<input type="text"/>	Green
4	x	3	=	<input type="text"/>	Green



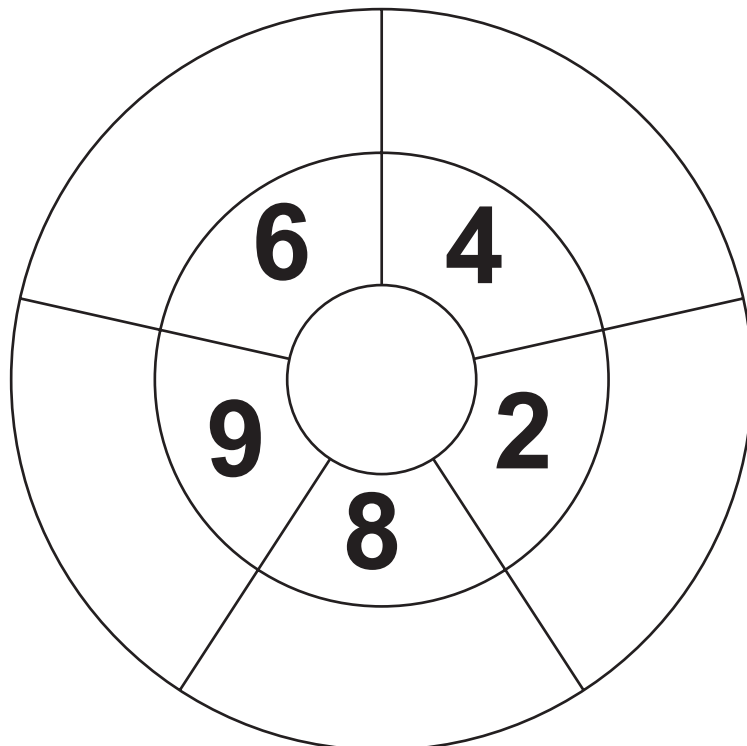
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## MULTIPLICATION WHEELS

Multiply the number in the centre with each of the other numbers and write the answers in the blank spaces.



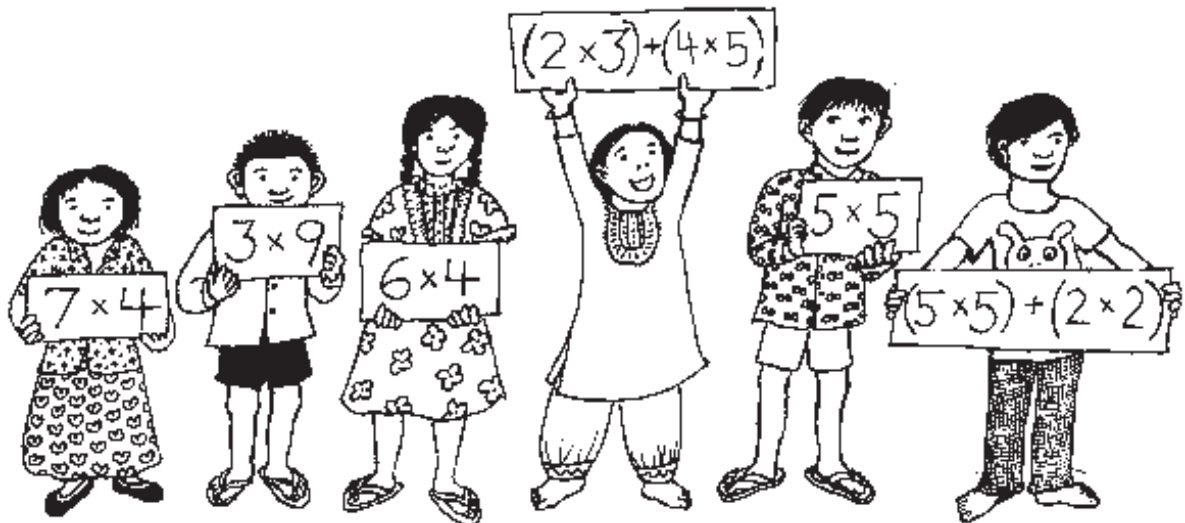
First choose any number for the centre, then repeat the same process.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## WHERE DO WE LIVE?

Solve the problems and draw lines to show where each child lives.



## MULTIPLY TO DECODE

Multiply to find the code.

<b>43</b>	<b>34</b>	<b>46</b>	<b>53</b>	<b>87</b>
<b>x 5</b>	<b>x 3</b>	<b>x 2</b>	<b>x 6</b>	<b>x 6</b>
<b>L</b>	<b>O</b>	<b>P</b>	<b>C</b>	<b>A</b>
<b>65</b>	<b>35</b>	<b>82</b>	<b>94</b>	
<b>x 7</b>	<b>x 8</b>	<b>x 5</b>	<b>x 8</b>	
<b>M</b>	<b>I</b>	<b>E</b>	<b>N</b>	

Arrange your answers in increasing order in the upper boxes and use the code letters under each product to find out who will catch the thief.

				C					

## MULTIPLICATION SQUARES

This is a **Multiplication Table**:

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

Look at the shaded **square** of four numbers:

2	3
4	6

Multiply the diagonal numbers in the square and see what happens:

$$2 \times 6 = 12$$

$$4 \times 3 = 12$$

Find four other squares in the Multiplication Table. Write them below and multiply the diagonals. What do you find?


$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \end{array}$$


$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \end{array}$$


$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \end{array}$$


$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \end{array}$$

## MULTIPLY AND MULTIPLY

Multiply and then multiply again:

$$\boxed{3} \xrightarrow{\times 2} \boxed{\phantom{00}} \xrightarrow{\times 8} \boxed{\phantom{00}}$$

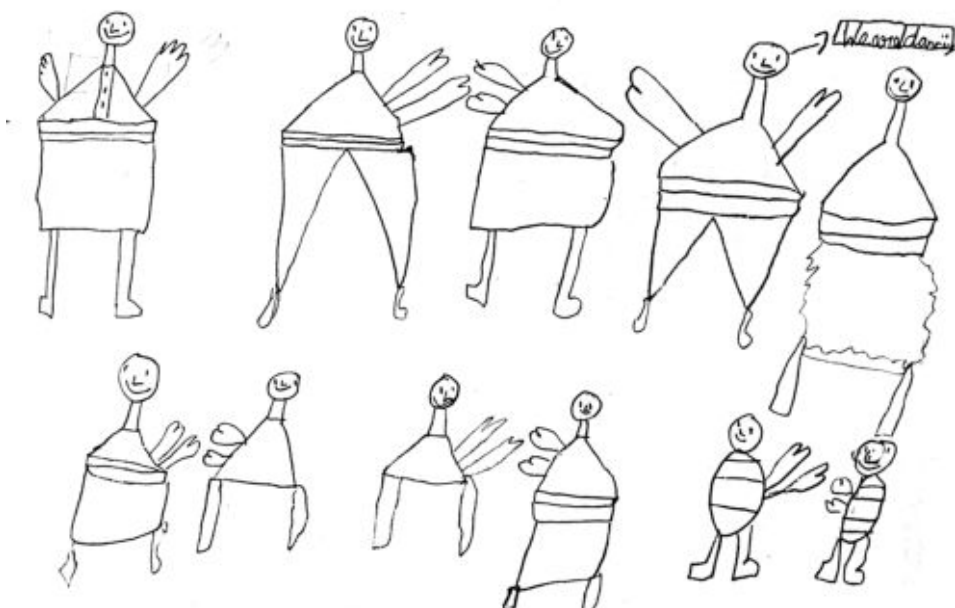
$$\boxed{2} \xrightarrow{\times 3} \boxed{\phantom{00}} \xrightarrow{\times 7} \boxed{\phantom{00}}$$

$$\boxed{3} \xrightarrow{\times 0} \boxed{\phantom{00}} \xrightarrow{\times 7} \boxed{\phantom{00}}$$

$$\boxed{5} \xrightarrow{\times 10} \boxed{\phantom{00}} \xrightarrow{\times 4} \boxed{\phantom{00}}$$

$$\boxed{3} \xrightarrow{\times 4} \boxed{\phantom{00}} \xrightarrow{\times 6} \boxed{\phantom{00}}$$

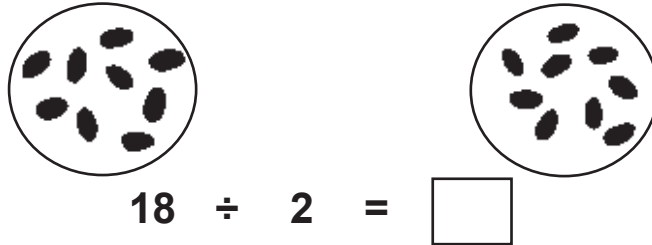
$$\boxed{3} \xrightarrow{\times 6} \boxed{\phantom{00}} \xrightarrow{\times 4} \boxed{\phantom{00}}$$



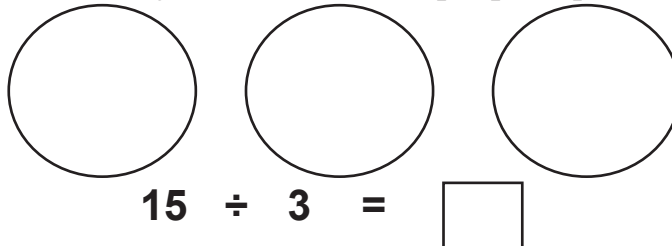
## DIVIDING JAMUN

How many does each person get?

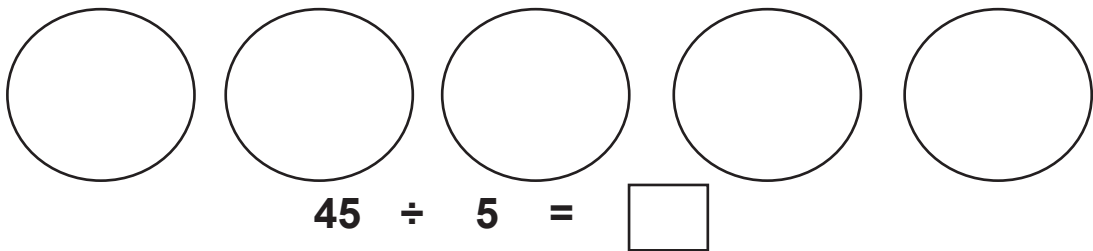
(a) Suppose there are 18 jamun. Give 2 people equal numbers:



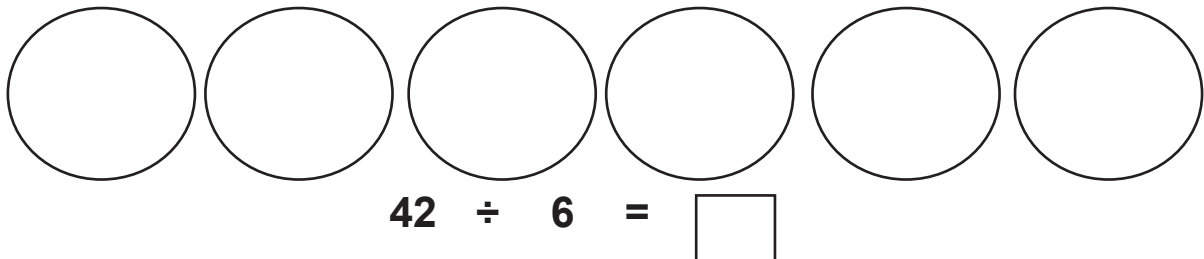
(b) Suppose there are 15 jamun. Give three people equal numbers:



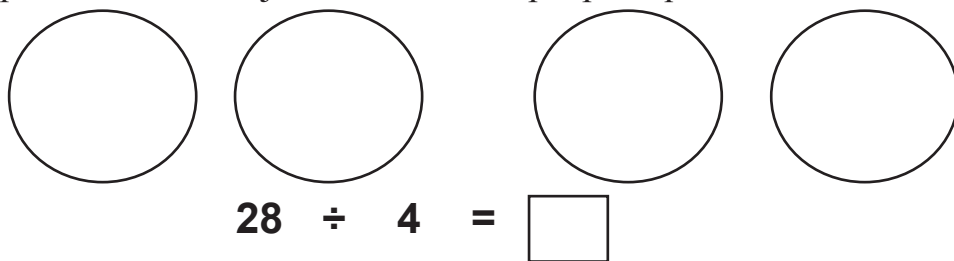
(c) Suppose there are 45 jamun. Give five people equal numbers:



(d) Suppose there are 42 jamun. Give six people equal numbers:



(e) Suppose there are 28 jamun. Give four people equal numbers:



(f) Now you make your own division problems on the back. Draw pictures and write the equations.

## THINKING ABOUT MULTIPLICATION AND DIVISION

- (a) Think of some numbers that can be divided by 2.

□	□	□	□
---	---	---	---

- (b) Think of some numbers that can be divided by 3.

□	□	□	□
---	---	---	---

- (c) Think of some numbers that can not be divided evenly by 3.

□	□	□	□
---	---	---	---

- (d) Think of a one-digit number. Multiply it by 4.

$$\square \times 4 = \square$$

Can the product be divided by 2? Show your work.

- (e) Think of some numbers that can be divided by both 2 and 4.

□	□	□	□	□
---	---	---	---	---



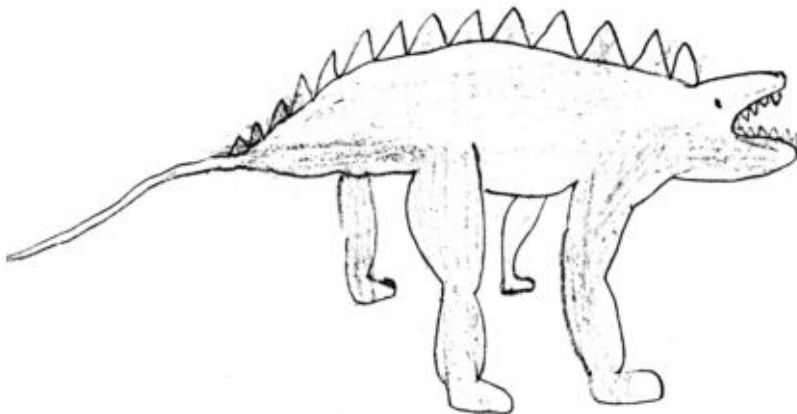


Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## COMPLETE THE MULTIPLICATION TABLE

Fill in the missing products.

x	0	1	2	3	4	5	6	7	8	9	10
0			0								
1		1					6				
2											
3					12						
4											
5											
6				18							
7											
8							48				
9											
10											



## MULTIPLY AND MATCH

Join the sums to their answers:

$8 \times 2$

$6 \times 4$

$7 \times 10$

$7 \times 4$

$9 \times 4$

$9 \times 3$

$7 \times 5$

$6 \times 3$

$5 \times 4$

$9 \times 5$

$6 \times 5$

$7 \times 3$

$4 \times 10$

28

18

20

16

35

70

21

24

27

45

40

30

36

**MULTIPLICATION AND DIVISION**

$$12 \div 4 = \square$$

Think! 4 times what number equals 12?

4 times 3 equals 12.

So  $12 \div 4 = 3$ .

(a)  $3 \times \square = 12$

(b)  $16 \div 4 = \square$

(c)  $14 \div 2 = \square$

(d)  $20 \div 4 = \square$

(e)  $5 \times \square = 20$

(f)  $64 \div 8 = \square$

(g)  $30 \div 3 = \square$

(h)  $45 \div 9 = \square$

(i)  $25 \div 5 = \square$

(j)  $18 \div 6 = \square$

(k)  $9 \times \square = 36$

(l)  $18 \div 9 = \square$

(m)  $24 \div 8 = \square$

(n)  $32 \div 4 = \square$

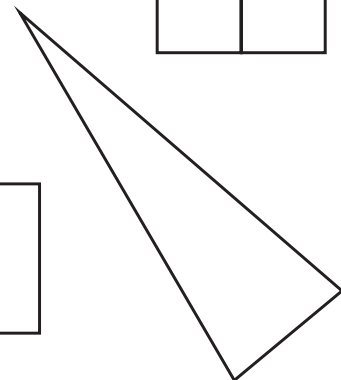
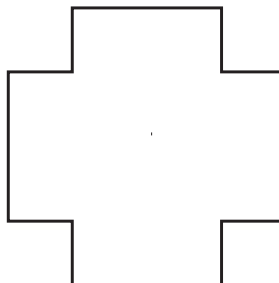
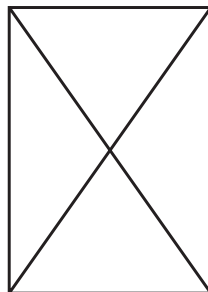
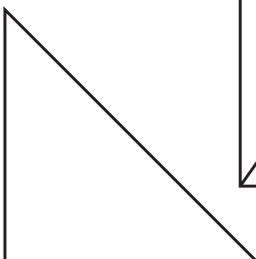
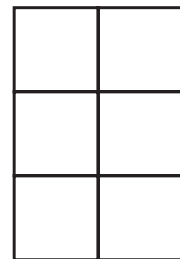
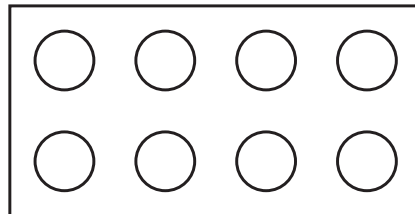
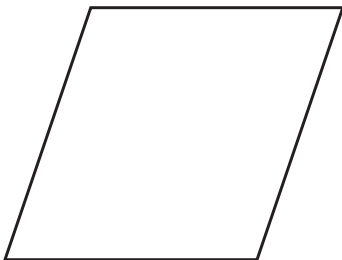
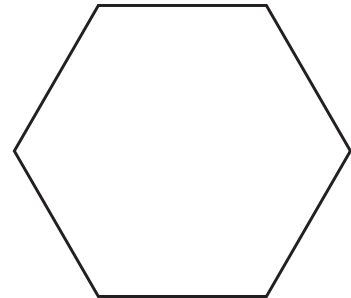
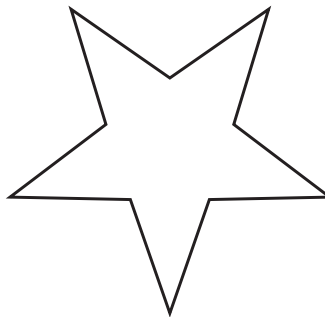
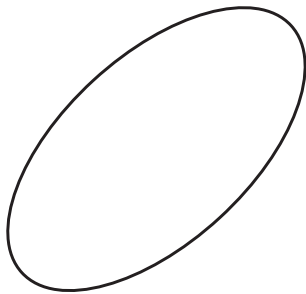
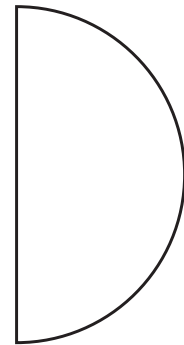
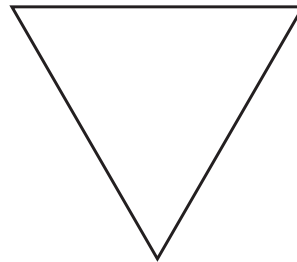
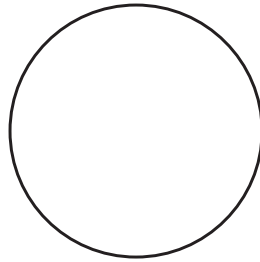
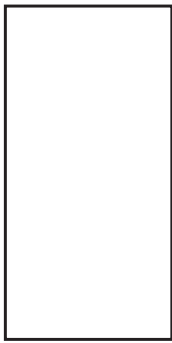


## DIVIDE IN HALF AND COLOUR HALF



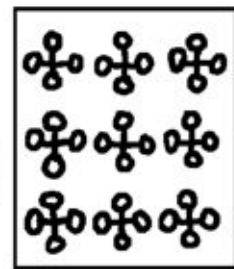
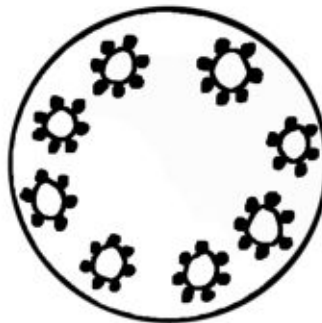
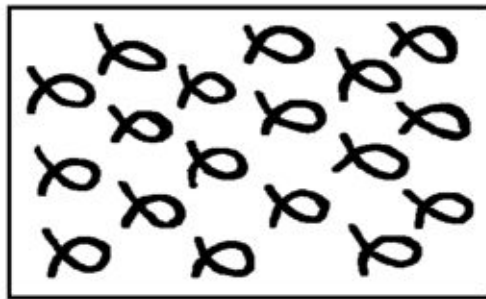
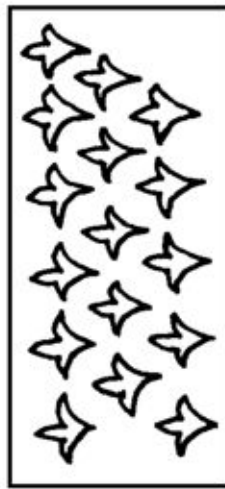
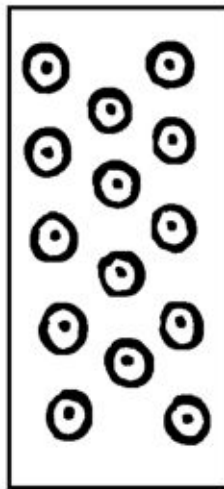
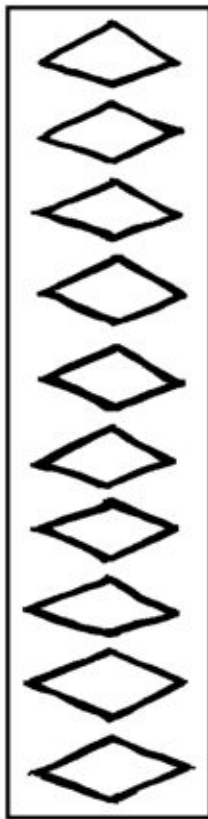
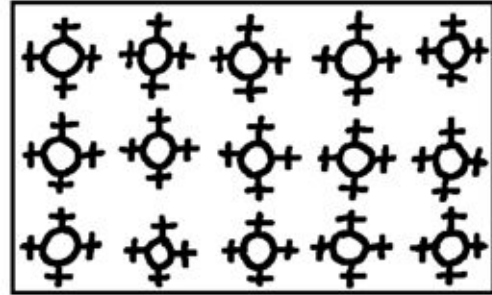
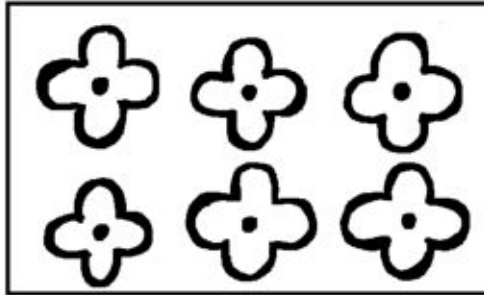
$\frac{1}{2}$

Cut each shape in half. Colour one half.



## HALF OF THE THINGS

Colour half of the things in each set.



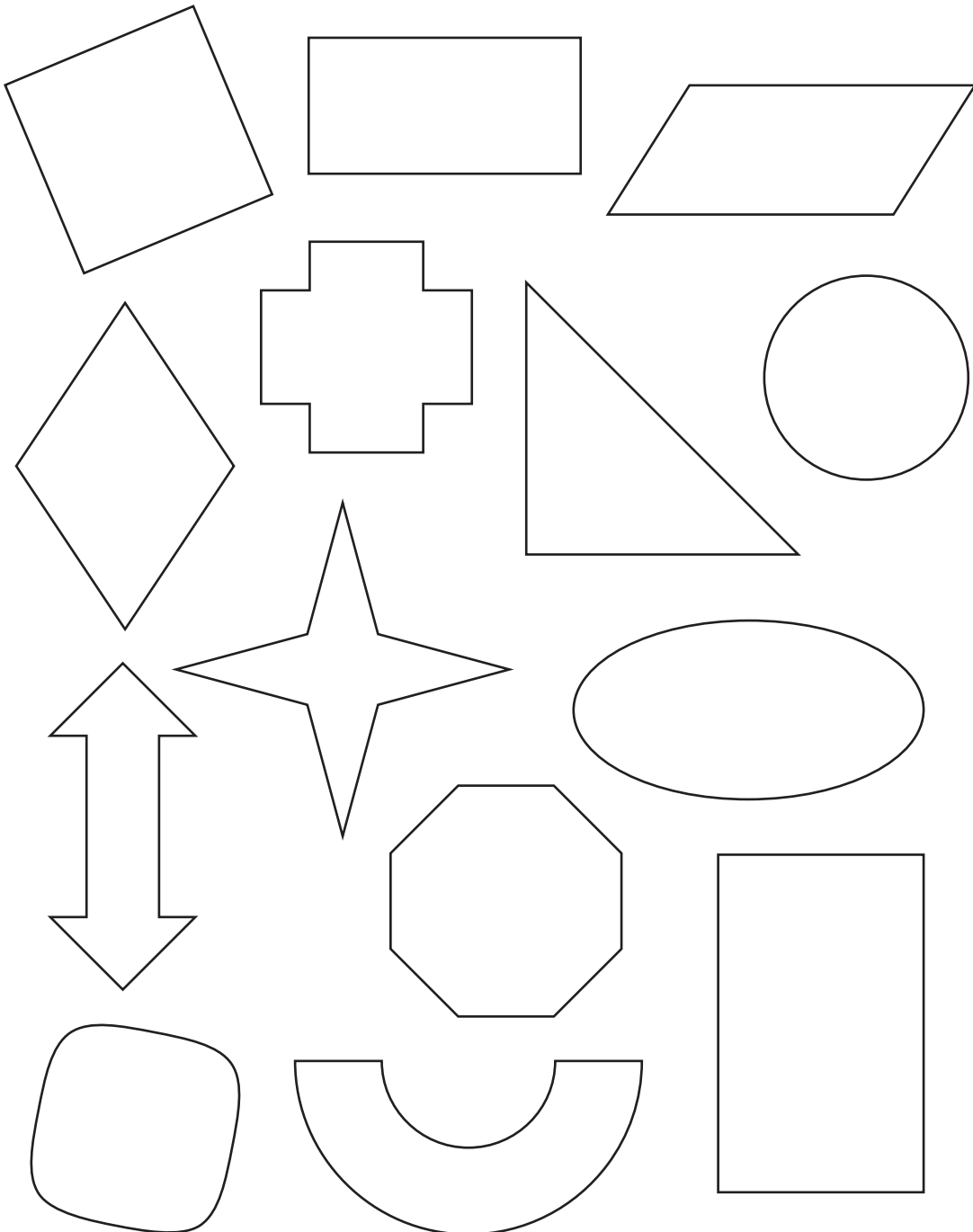
## COLOUR ONE QUARTER



$$\frac{1}{4}$$

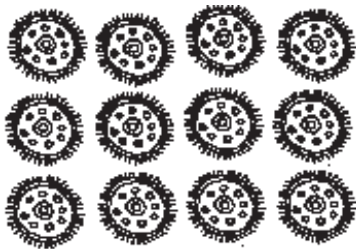
Divide each shape into four equal parts. Colour one part.

This one part out of four is called one-fourth or one quarter ( $\frac{1}{4}$ ).



## ONE QUARTER OF THE OBJECTS

Ring one quarter (one-fourth) of the things in each set.



Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## COLOURING FRACTIONS OF A WHOLE

Colour the bar to match the fraction.

$2/4$

--	--	--	--

$5/5$

--	--	--	--	--

$4/6$

--	--	--	--	--	--

$1/2$

--	--	--	--	--	--

$7/10$

--	--	--	--	--	--	--	--	--	--

$3/4$

--	--	--	--

$3/6$

--	--	--	--	--	--

$9/13$

--	--	--	--	--	--	--	--	--	--	--	--	--

$1/4$

--	--	--	--

Are any of these fractions the same?



## DRAW THE OTHER HALF

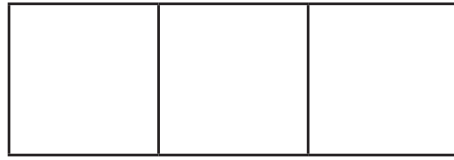
Half of each shape is given.

You draw the other half.

The grid contains six shapes on the left side, each with a vertical dashed line indicating a line of symmetry. The shapes are:

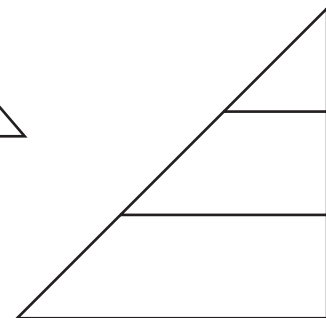
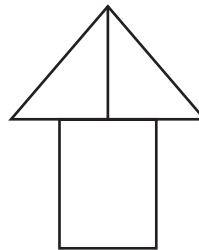
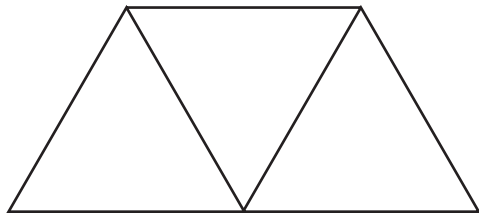
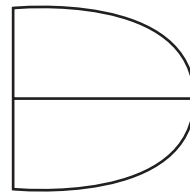
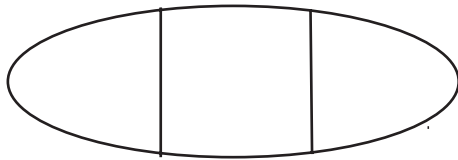
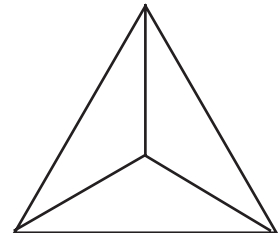
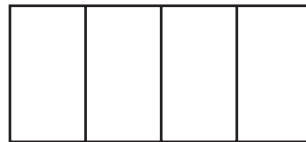
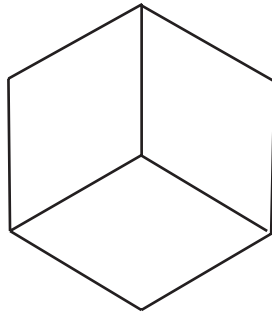
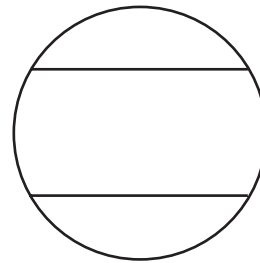
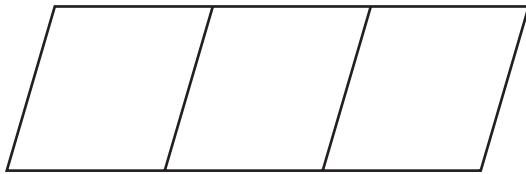
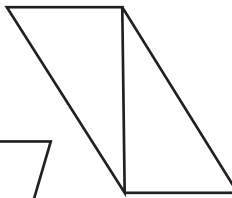
- 1. A vertical rectangle with a dashed line on its right side.
- 2. A larger vertical rectangle with a dashed line on its right side.
- 3. A right-pointing triangle with a dashed vertical line on its right side.
- 4. A square with a dashed vertical line on its right side.
- 5. A pentagon with a dashed vertical line on its right side.
- 6. A complex shape with a dashed vertical line on its right side.

# THIRDS



# 3<sup>rds</sup>

Ring the pictures that show thirds.



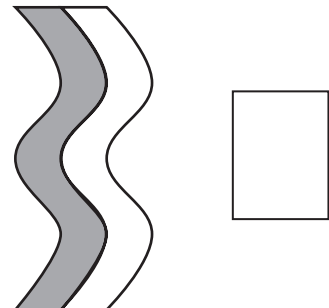
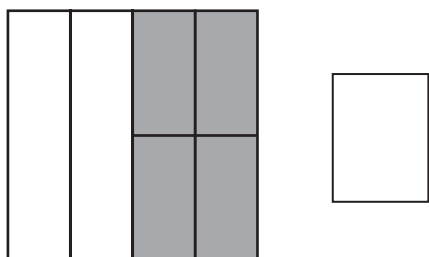
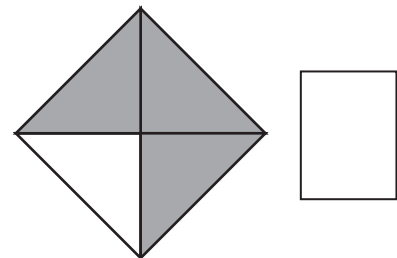
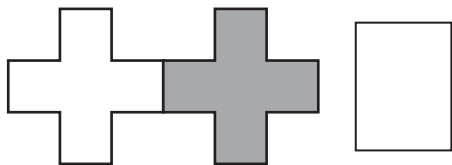
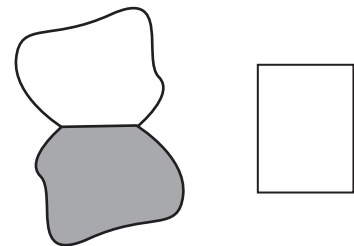
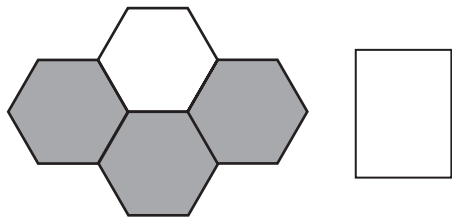
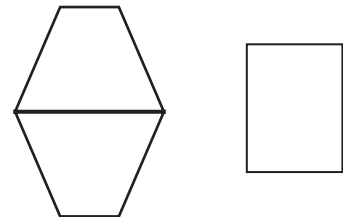
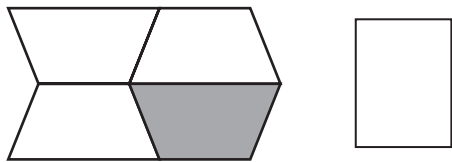
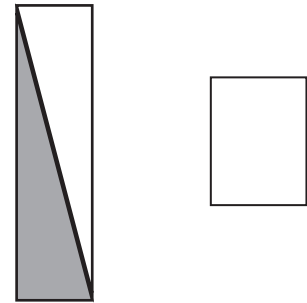
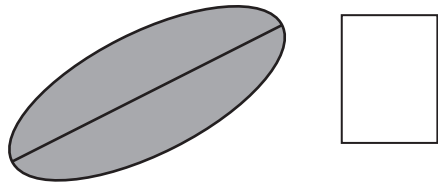
## ONE-FOURTH OR ONE HALF?

Draw lines to show if the shaded parts are  $\frac{1}{4}$  or  $\frac{1}{2}$ .

$\frac{1}{4}$   $\frac{1}{2}$

## WHAT FRACTION?

How much of each shape is shaded?



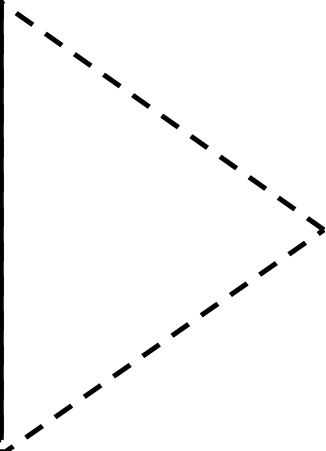




1

0

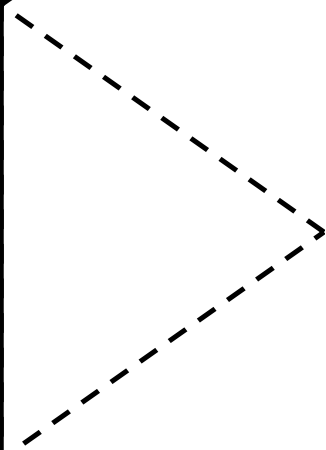
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2

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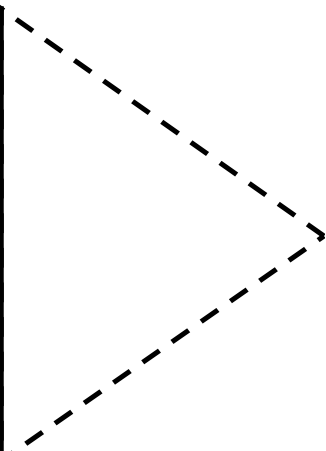
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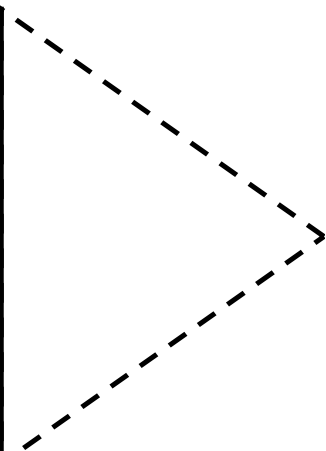
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4

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5

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6

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7

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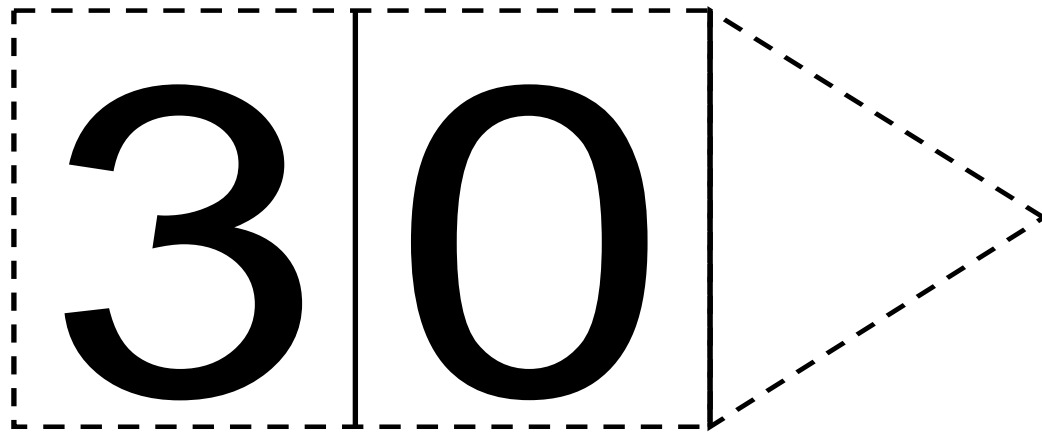
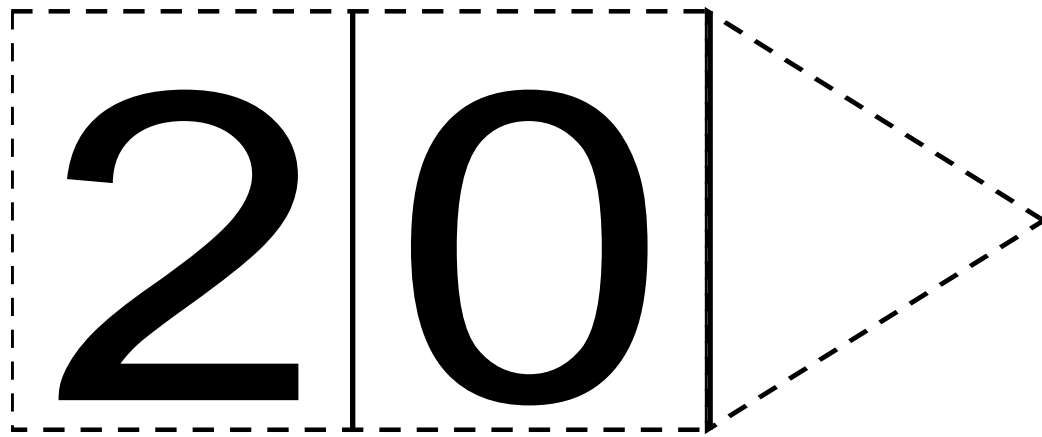
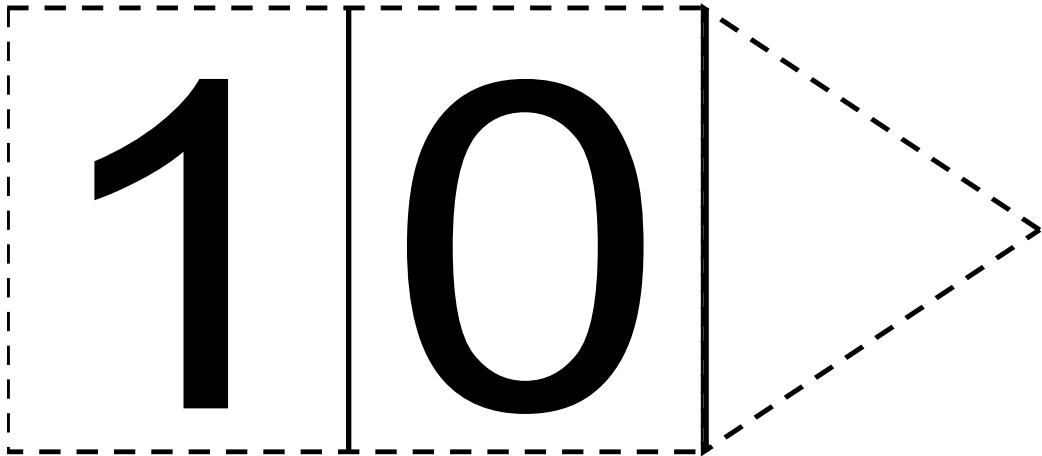
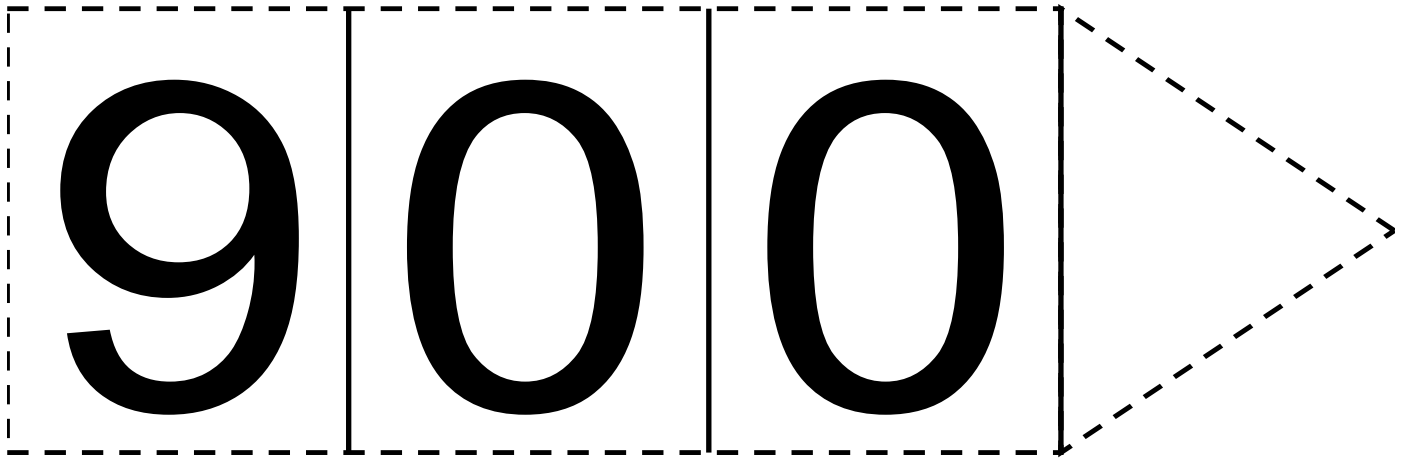
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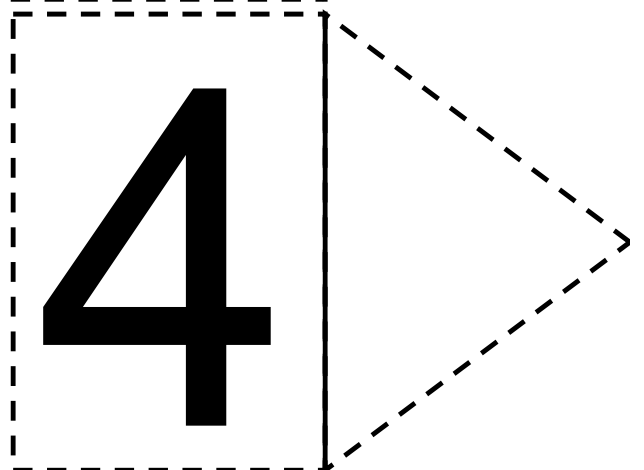
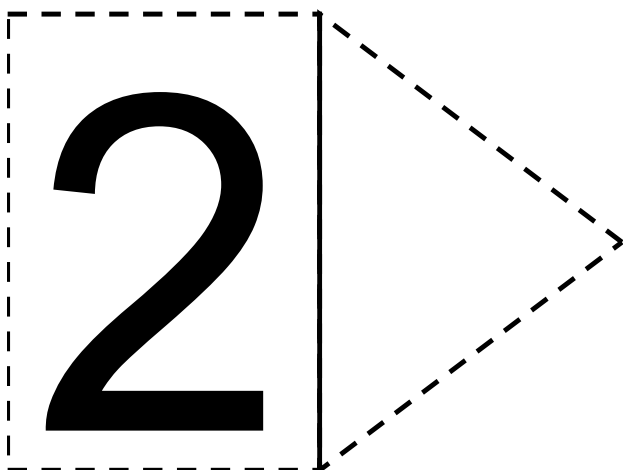
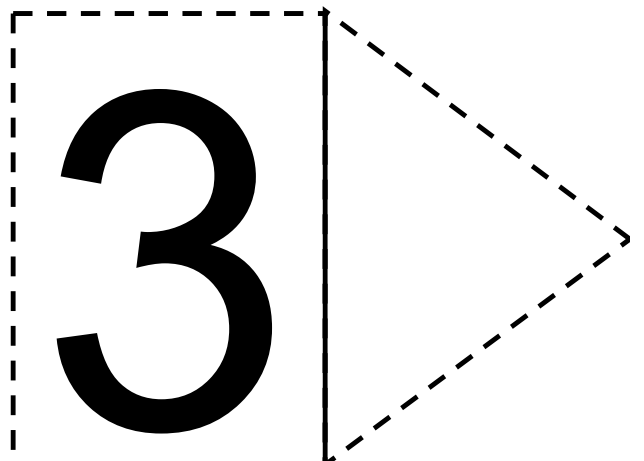
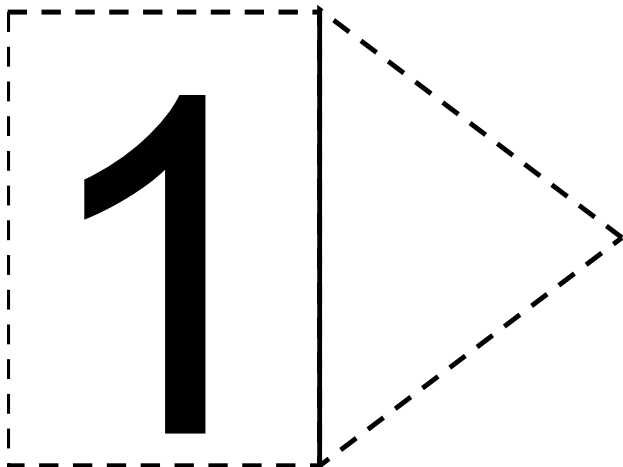
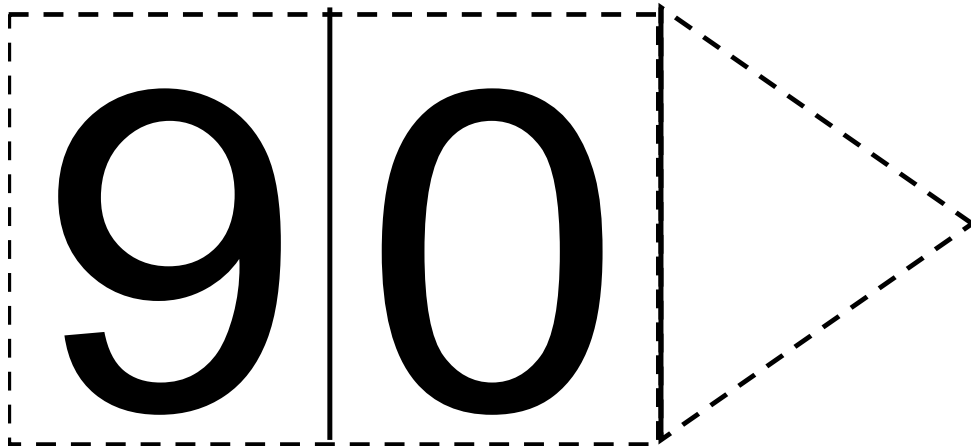
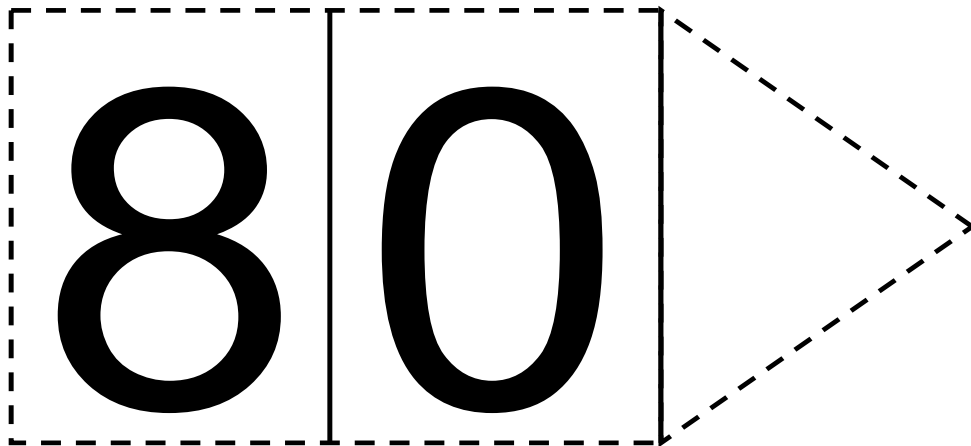


4 0

5 0

6 0

7 0



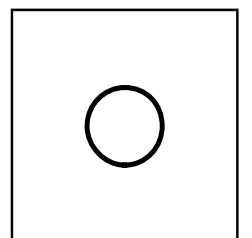
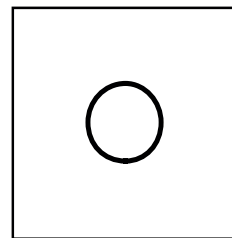
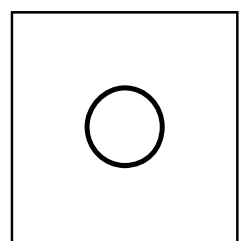
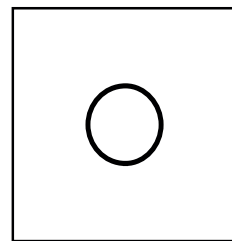
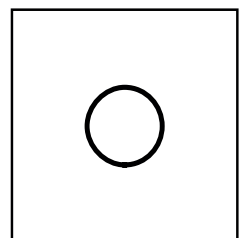
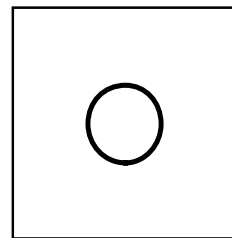
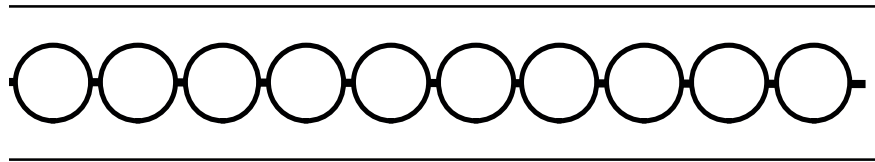
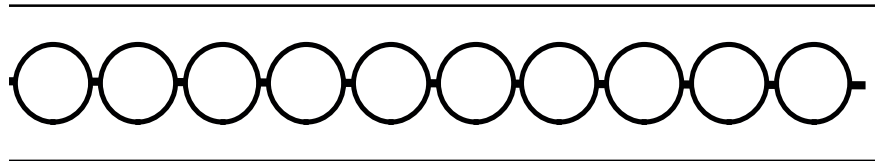
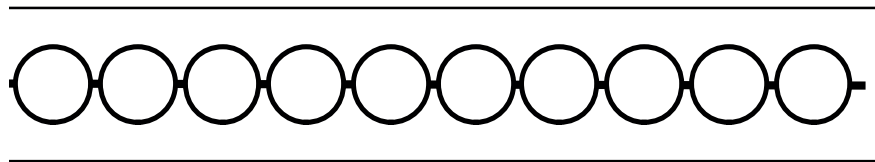
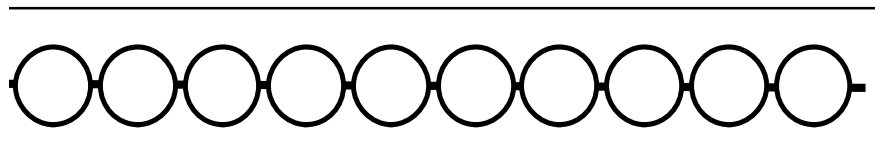
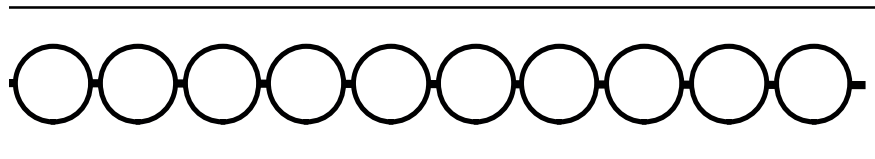
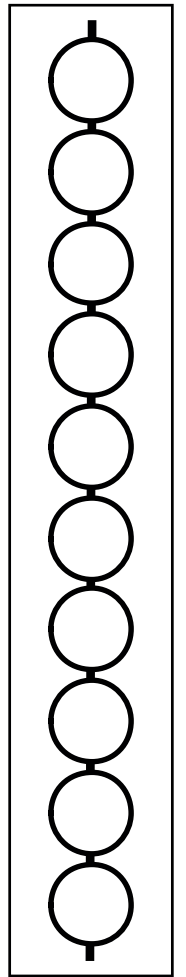
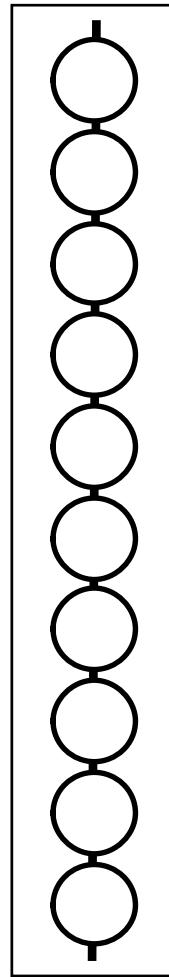
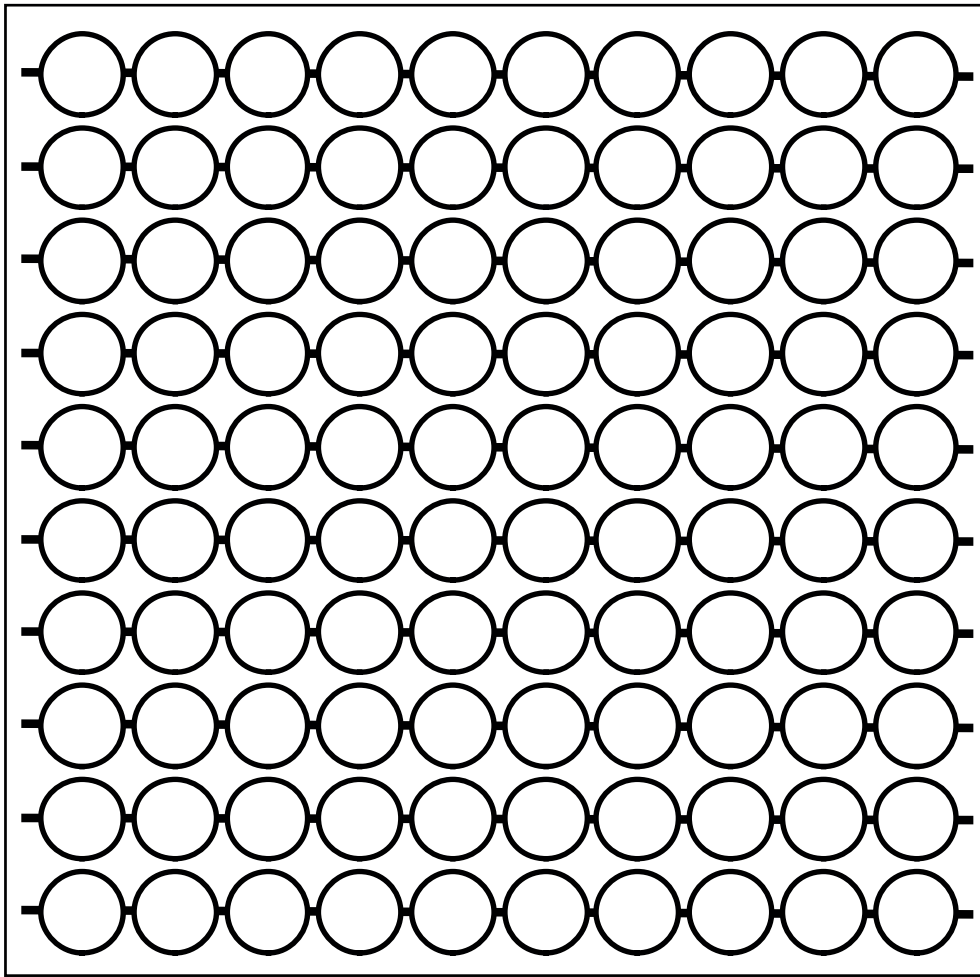
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