



10-11 YEARS | WEEK 01

Maths-Basic Maths

1. Complete the Grid

11. Expanded form

2. Rounding off

12. Ordering numbers

3. Bus timetable

13. Ordering numbers

4. Add and write

14. Quiz

5. Place value

15. Quiz

6. Negative numbers and co-ordinates

16. Geometry - Game

7. Answer the questions

17. Geometry - Nets and solid shapes

8. Write roman numerals

18. Geometry - Transformations

9. Arranging numbers

19. Geometry - Transformations

10. Place value

20. Geometry - Reflections

Complete the Grid

Complete the grid using each item once, use column and row clues to determine the right position

2, 3, 18, 27, 30, 36, 49, 64, 67

	PRIME NUMBERS	MULTIPLES OF 3	PERFECT SQUARES
EVEN NUMBERS			
ODD NUMBERS			
FACTORS OF 36			

Analyse the Animal Chart

dogs	X X X X X	X X
cats	X X X X X	
turtles	X X X X X	X X X X X
snakes	X X X	

X = 2 animals

- Number of dogs: _____
- How many more turtles than the dog? _____
- How many animals in all? _____

----- Fold here -----

Answers:

	Prime numbers	Multiples of 3	Perfect squares
Even	2	18,30,36	36,64
Odd	3,67	3,27	49
Factors of 36	2,3	3,18,36	36

Animal Chart

- 14
- 6
- 50

Rounding off

Draw a line to match the number to its nearest tenth

2.26	<table border="1"> <tr><td>2.1</td></tr> <tr><td>2.2</td></tr> <tr><td>2.3</td></tr> <tr><td>2.4</td></tr> <tr><td>2.5</td></tr> <tr><td>2.6</td></tr> <tr><td>2.7</td></tr> <tr><td>2.8</td></tr> <tr><td>2.9</td></tr> </table>	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.09
2.1											
2.2											
2.3											
2.4											
2.5											
2.6											
2.7											
2.8											
2.9											
2.63	2.425										
2.84	2.76										
2.15	2.54										
2.392											

Who am I?

From the table select the number based on the clues given below.

- Less than a whole.
- If you round me to the nearest whole, I round up.
- I have two decimals.
- I am 0.6 when rounded to the nearest tenth.

1.07	0.38	0.74	0.58
0.6	0.53	0.65	0.49

Answers

2.63 → 2.6	2.09 → 2.1
2.84 → 2.8	2.425 → 2.4
2.15 → 2.2	2.76 → 2.8
2.392 → 2.4	2.54 → 2.5
2.63 → 2.4	
Who am I? 0.58	

Bus timetable

Here is bus time- table along with fair details, answer the questions based on the table



Karnataka Roadways Timetable					
Route	Dep. Time from Bangalore	Dep. Time from other direction	Distance in Km		Fare in Rs.
Bangalore - Chennai	16.35, 21.00	16.10, 20.20	469		255
Bangalore - Vellore	09.49	08.30	360		212
Bangalore - Salem	12.00	05.00	319		195
Bangalore - Tirupati	07.10, 08.10	05.55, 06.40	617		325

1. What is the bus fare from Bangalore to Salem?
2. At what time Bus to Vellore departs from Bangalore?
3. How many buses are there from Bangalore to Chennai?
4. What is the distance from Bangalore to Tirupathi?
5. Which city is nearest to Bangalore?
6. How many buses are there from Bangalore to Vellore?
7. What is the bus fare from Bangalore to Chennai?
8. From the map, which city is farthest to Bangalore?
9. At what time Bus to Bangalore departs from Vellore?
10. What is the distance from Bangalore to Chennai?

Answers					
7 Rs 225	8 Tirupati	9 8.30	10 469		
1 Rs 195.	2 9.49	3 2	4 617	5 Salem	6 One



Place value



Write the place value of the underlined digit:

	As a decimal	As a fraction	In words
2. <u>3</u> 45	0.04	4/100	Four hundredths
3. <u>4</u> 56			
2. <u>4</u> 78			
1. <u>6</u> 57			
5. <u>9</u> 02			
6. <u>7</u> 78			



Negative numbers and co-ordinates



Write short definition of these terms:

Positive Numbers

Negative Numbers

Numbers above zero

Numbers below zero

Arrange these numbers in descending order:

-18, -21, 36, -100, 9, -45, 23

Arrange these numbers in ascending order:

56, -12, -19, 7, -23, -31, 31



Answer the questions



Answer the following questions:

1. What is 0.1 less than 20? _____
2. What is 0.01 less than 20? _____
3. What is 0.2 less than 18? _____
4. What is 0.02 less than 18? _____
5. What is 0.3 less than 7.1? _____
6. What is 0.03 less than 7.1? _____
7. What is 0.4 less than 5.2? _____
8. What is 0.04 less than 5.2? _____



Write roman numerals



Write roman numerals for the integers given below.

46

2. 71

3. 42

4. 75

5. 68

6. 28

7. 38

8. 67

9. 64

10. 57

11. 59

12. 24

13. 44

14. 42

15. 70

16. 31

17. 62

18. 49

19. 57

20. 85



Arranging numbers



1. Arrange the following numbers in descending order:

63521047, 7354206, 63514759, 7355014, 102345680

2. Arrange the following numbers in ascending order:

9873426, 24615019, 990357, 9874012, 24620010

3. Write the smallest 9 Digit Number

4. Write the biggest 9 Digit Number

5. Write the number name for the number 19,32,35,372 according to the Indian system.

6. Find the predecessor and the successor of the difference of the biggest 9 digit number and the smallest 9 digit number.



Place value



A. Write the place value of the digit written in red. Write the place value in words.

i. 328537

ii. 437521

iii. 803789

iv. 719357

v. 286293

vi. 987615

B. Write the face value of the digit written in red. Write the face value in words.

i. 3283456

ii. 4373267

iii. 8031368

iv. 7191476

v. 2469734

vi. 9872728



Expanded form



1. Write the expanded form of the following numbers:

i. 12344789 _____

ii. 65872681 _____

iii. 90273123 _____

iv. 29012457 _____

2. See the expanded forms of the numbers and write the standard form. Write the number in words.

i. $90000 + 8000 + 700 + 60 + 5$

ii. $36000 + 2000 + 300 + 80 + 7$

iii. $500000 + 40000 + 3000 + 200 + 50 + 9$

iv. $900000 + 20000 + 7000 + 10 + 2$

3. Fill in the blanks with correct number.

i. $68735 =$ _____ ten thousands + _____ thousands + _____ hundreds + _____ tens + _____ ones

ii. $589044 =$ _____ hundred + _____ thousands + _____ ones

iii. $87632 =$ (_____ x 10000) + (7 x _____) + (_____ x 100) + (3 x _____) + (_____ x 1)

iv. $54907 = 50000 +$ _____ + _____ + 7



Ordering numbers



A. Rearrange in ascending order as quickly as you can. Repeat this sheet once in a week and keep a record of your time.

1. 4747 2674 8617 7147

2. 16641 16614 16416 16461

3. 46347 46743 46734 46473

B. Arrange the given numbers in ascending order as quickly as you can. Repeat this sheet once in a week and keep a record of your time.

1. 58,992 59,228 8,59,992 1,54,992

2. 7,96,441 8,96,441 7,99,641 8,59,821

3. 6,89,774 6,78,940 7,18,444 5,68,710

4. 3,80,751 3,36,547 3,98,694 3,26,880

5. 5,56,442 5,26,452 5,95,442 5,34,561



Ordering numbers



A. Rearrange in descending order as quickly as you can. Repeat this sheet once in a week and keep a record of your time.

1. 913 912 219 293

2. 6767 6677 7676 7766

3. 14201 14102 15112 15122

4. 76391 78731 76139 76319

B. Arrange the given numbers in descending order as quickly as you can. Repeat this sheet once in a week and keep a record of your time.

1. 71,800 40,875 72,984 6,98,504

2. 8,63,019 8,60,548 8,65,881 8,59,004

3. 6,30,062 1,63,050 8,39,035 5,69,204

4. 3,80,651 3,37,547 3,90,694 3,36,880

5. 8,56,422 8,26,452 8,95,442 8,34,561



Quiz



A. Choose the right answer and fill in the blank:

1. The only even prime number is _____
 - a. 0
 - b. 2
 - c. 4
 - d. 6

2. The number which is neither prime nor even _____
 - a. 1
 - b. 2
 - c. 10
 - d. 100

3. The number which has more than 2 factors is called a _____
 - a. Even
 - b. Odd
 - c. Prime
 - d. Composite

4. _____ is the smallest composite number.
 - a. 0
 - b. 2
 - c. 3
 - d. 4

Note: Do the sums as quickly as you can. Repeat this sheet once in a week and keep a record of the time it took to complete.



Quiz



1. A pair of numbers that do not have any common factor other than 1 are _____ numbers.
 - a. Even
 - b. Co-prime
 - c. Twin prime
 - d. Prime

2. Check if the given pair of numbers are co-primes:
 - a. 15 and 38
 - b. 25 and 26
 - c. 12 and 18

3. Fill in the blanks:
 - a. The numbers with just 2 factors are called _____ numbers.
 - b. Smallest even prime number is _____
 - c. Numbers with more than 2 factors are called _____ numbers.
 - d. 1 is neither _____ nor _____
 - e. All composite numbers have more than _____ factors.

4. Which pairs are co-prime?
 - a. 16, 18
 - b. 15, 14
 - c. 27, 28
 - d. 8, 15

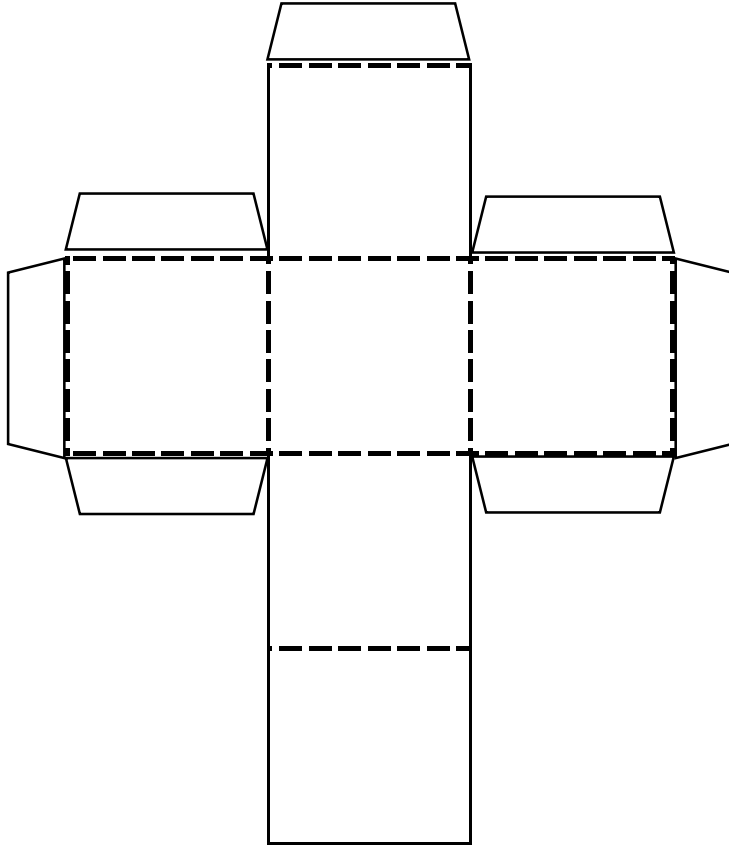
Note: Do the sums as quickly as you can. Repeat this sheet once in a week and keep a record of the time it took to complete.

M: Geometry - Nets and solid shapes



A geometry net is a two dimensional shape which upon folding forms a 3 dimensional solid. A solid may have different nets. Let us make some solid figures from the given nets.

1



Cut along solid lines.

Fold along dotted lines

Glue it together.

Cube is formed.

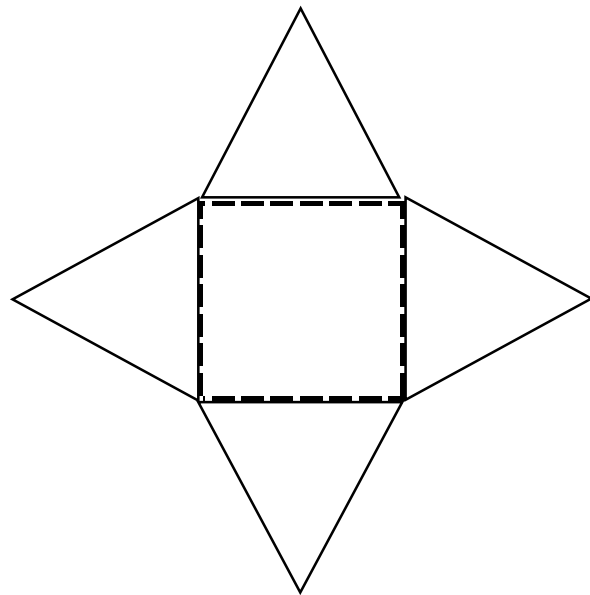
2

Cut along solid lines.

Fold along dotted lines.

Glue together.

Cuboid is formed.

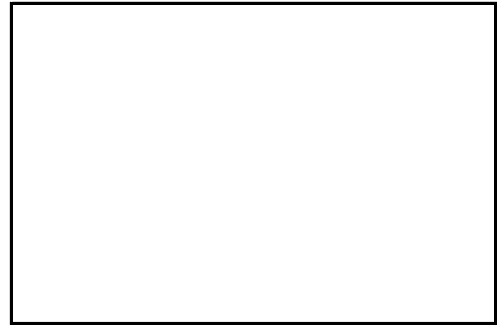
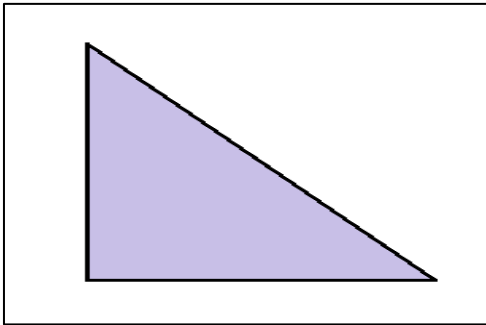


M: Geometry - Transformations

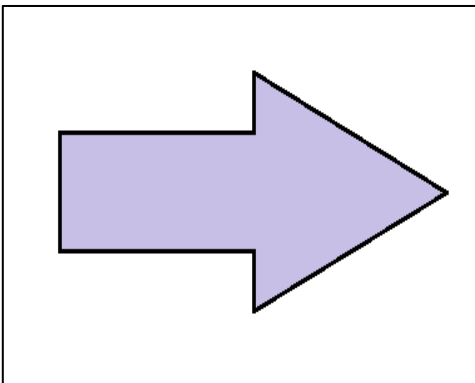


In mathematics, transformation geometry is the study of geometry by focusing on groups of geometric transformations. A flip is a motion in geometry in which an object is turned over the straight line to form a mirror image. Enlargement also called as dilation is a kind of transformation that changes the size of the object. Transform the figures according to the instructions given.

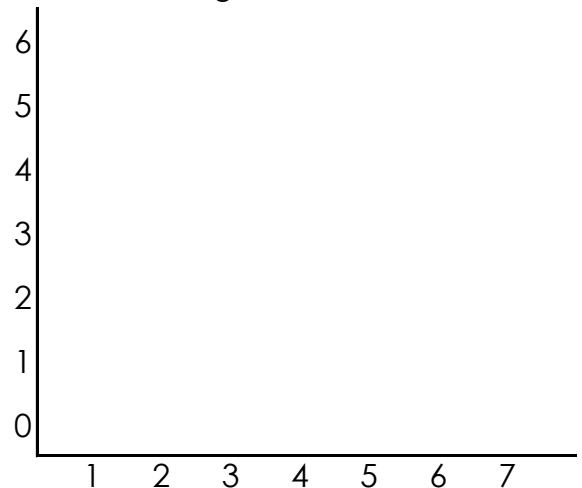
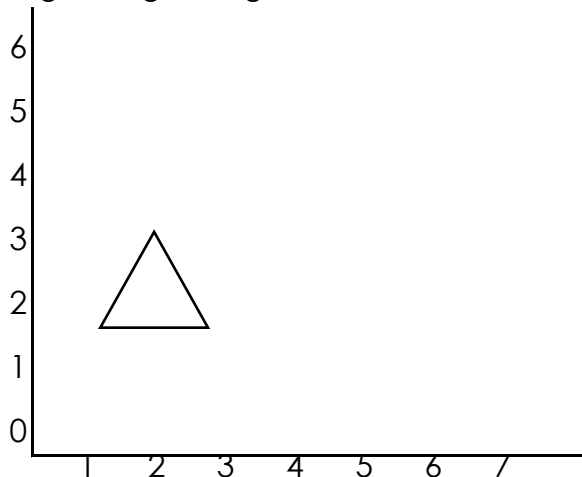
1 Draw the figure formed by rotation of given figures by 90 degrees.



2 Draw the figure formed by flipping the figure horizontally.



3 Enlarge the given figure with the centre of enlargement at the origin.



M: Geometry - Transformations

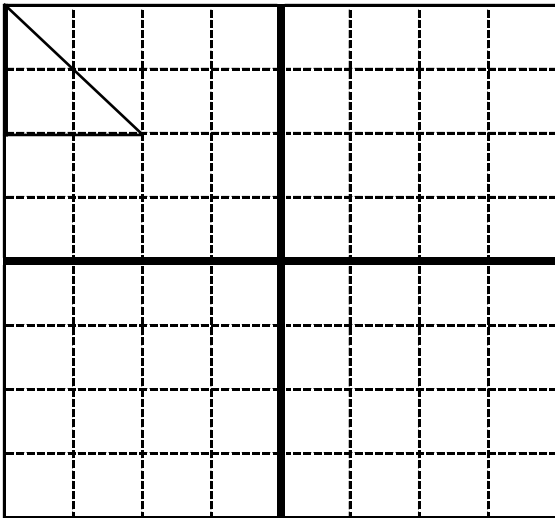


In translation, a shape is moved along a straight line without turning. The shape in a new position is called the translation image. Reflection is the mirror image of the object.

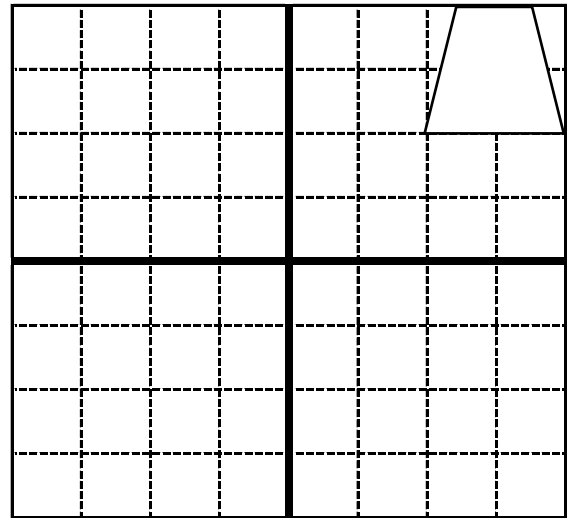
Draw the figures according to the given instructions.

Graph the image of the triangle using the given instructions. One box is one unit.

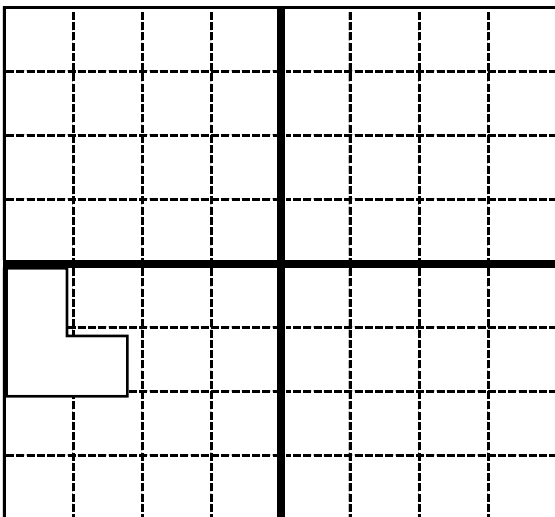
1 2 right and 3 down



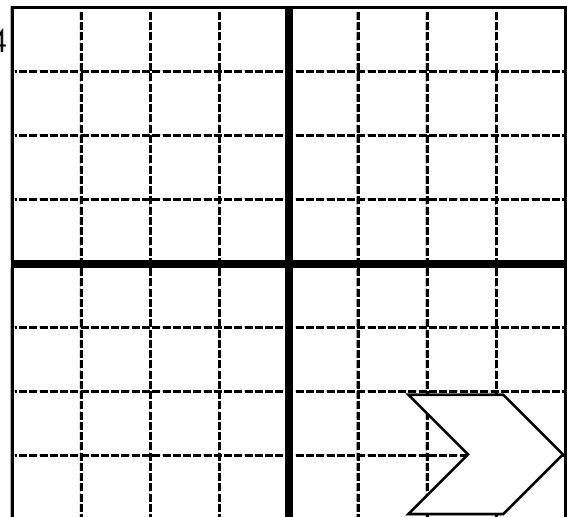
2 4 left



3 3 up 2 right



4 5 left

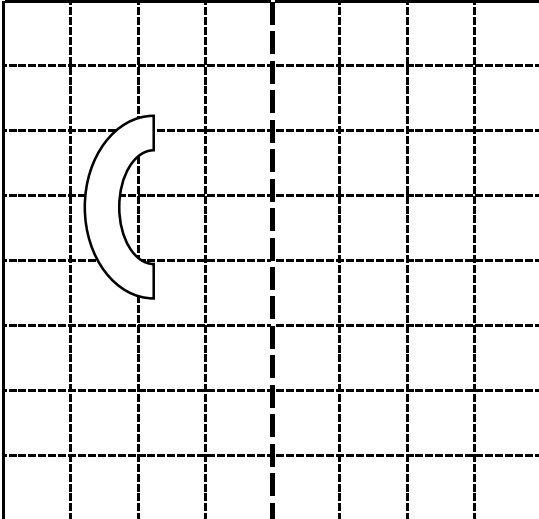


M: Geometry - Reflections

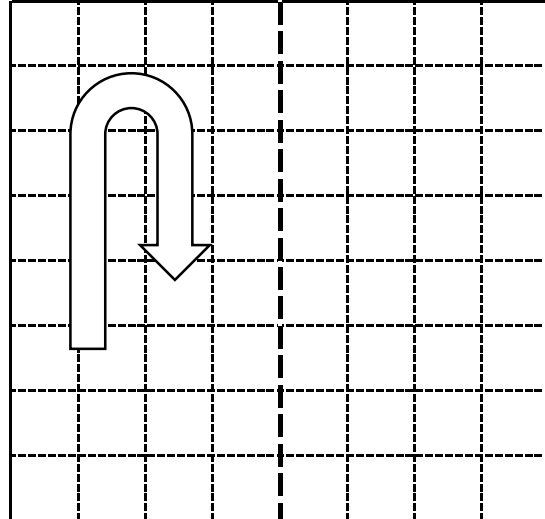


To perform geometric reflections, a line of reflection is needed. The two figures appear opposite to each other. Draw the reflections of the following figures.

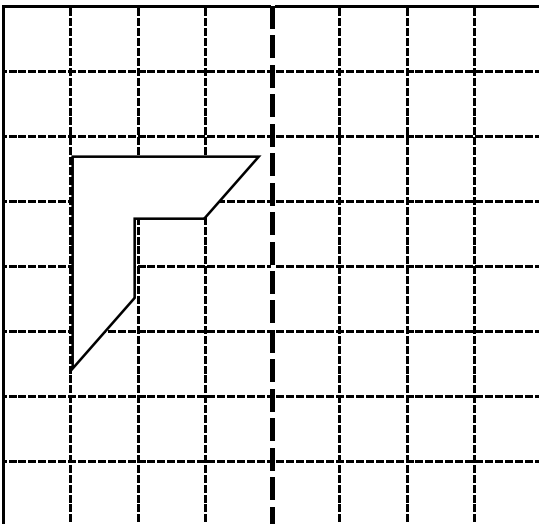
1



2



3



4

