- **1)** Encircle the correct option
  - a) The ratio of Rs 8 to 80 paisa is\_\_\_\_\_
    - **I.** 1:10
    - **II.** 10:1
    - III. 1:1
    - **IV.** 100:1
  - b) The sum of exterior angles of a polygon is
    - I. 180°
    - **II.** 270°
    - III. 360°
    - **IV.** 540°
  - c) Which of the following letters of English alphabets has more than 2 lines of symmetry?
    - I. Z
    - **II.** 0
    - III. E
    - **IV.** H
  - d) In what ratio must 54 be decreased to become 42?
    - **I.** 7:9
    - **II.** 9:7
    - **III.** 7:6
    - **IV.** 9:6
  - e) How much water is required to fill a tank which has a capacity of 6 litres when 3500ml is already there in the tank?
    - I. 3000 litres
    - II. 3000ml
    - III. 2500 litres
    - **IV.** 2500 ml

- f) The mode of the data 13, 16, 12, 14, 19, 12, 14, 13, 14 is
  - **I.** 16
  - **II.** 12
  - **III.** 14
  - **IV.** 13
- **g)** Sam scored 2 goals in the first and 4 goals in the second match, the percentage increase in goals scored is
  - I. 100%
  - **II.** 75%
  - **III.** 50%
  - IV. 25%
- h) England is 5 hours behind Pakistan. When it is midnight in Pakistan the time in England is
  - I. 12 am
  - **II.** 12am
  - III. 7 pm
  - IV. 6 pm
- i) The simplest form of the ratio 24 : 48 : 6 is
  - **I.** 12:24:6
  - **II.** 8:16:2
  - **III.** 4 : 12 : 1
  - **IV.** 4:8:1
- j) The sum of two complementary angles is
  - **I.** 180°
  - **II.** 90°
  - **III.** 270°
  - IV. 360°

# Q2.

- a) Convert
  - I. 1545 to 12 hour clock \_\_\_\_\_\_
  - II. 6:30 pm to 24 hour clock \_\_\_\_\_
- **b)** Calculate the percentage when an amount decreases from 162 to 150.

c) 30% of a number is 1200. What is the original number?

d) Calculate the surface area of a cube whose volume is 125cm<sup>3</sup>.

# a) Express the following quantities as a ratio in its simplest form.

I. Grams in a kilogram and centimeters in a meter

II. Angles of a quadrilateral and sides of a hexagon

**b**) For the following data. Find 6, 10, 10, 12, 13, 15



c) Find the value of consumption of petrol in litres per km if a car uses 91 litres for 7 km.

Q3.

#### Q 4.

a) From the given figure find the value of the stated angles





- **b)** Calculate the sum of interior angles of
  - I. Pentagon







c) Calculate the value of the base angles of an isosceles triangle



## Q 5.

**a)** Write down the order of rotational symmetry for the following figures.



- **b)** Work out the value of *x* for the given equation:
  - **I.** y= 2 x + z when y= 10 and z= 3



- a) Create an equation for the given expressions.
  - I. Six times a number is 10 more than the number

#### **II.** Subtracting 5 from p gives the result 2

## Q 6.

a) The price of a car is \$90000, find the new price ifI. A discount of 12% is given after the first year

**II.** Further discount of 10% is given after the second year.

#### Question Bank for grade 7

b)A rectangular piece of land is 4.5 km long and 2.5 km wide. Find the ratio of I. Its width to its length.

**II**. length to its perimeter.

### Q 7.

- **a**) Last month Ahmed's call meter for his phone read 12526 units. This month it read 12926 units.
  - **I.** How many units did he use over the month?

**II.** If he pays \$25 for every 50 units used, how much must he pay for the use of the phone this month?

#### Question Bank for grade 7

**b)** Find two consecutive numbers such that the sum of the larger number and three times the smaller number is 41.

c) A car leaves London at 9:15 pm on Wednesday and arrives at Manchester 5 ½ hours later. At what time does the car arrive at its destination?

Q 8.

a) An open rectangular tank of length 25 cm width 20 cm and height 15 cm contains water upto a height of 13 cm. Calculate



I. The volume of the water in litres.

II. The total surface area of the tank in contact with the water.

**b**) The interior angle of a regular polygon is 162°. Calculate the number of sides of the polygon.

c) Calculate the exterior angle in a 13-sided polygon.

# Q 9.

a) Construct a perpendicular bisector of a line segment measuring 6.2cm.



**b**) Find the value of *x* and y in the following diagram.







**a**) The pie chart shows the number of people taking part in a marathon. If 656 girls took part in the marathon then find,



II. The percentage of participants who were men



b)

**I.** From the given graph, fill in the unknown values for the function y=x - 1.

					5					
					4					
					3					
					2			$\square$		
					1					
-5	-4	-3	-2	-1	0	1	2	3	4	5
					-1					
					-2					
			$\square$		-3					
					-4					
					-5					

x	-1		1	
У		3		-4

**II.** Find the gradient of the graph given above.

