

**CBSE**  
**Class VII**  
**Mathematics Term 1**  
**Sample Paper - 3**

- Q1.** The square of an odd integer is \_\_\_\_\_.
- (a) A positive even number
  - (b) A positive odd number
  - (c) A negative even number
  - (d) A negative odd number
- Q2.** The sum of the cost price and \_\_\_\_\_ is called the net price of that product.
- (a) Additional expenses
  - (b) Profit
  - (c) Loss
  - (d) Selling price
- Q3.** Manoj bhai bought an old tractor through a broker for Rs. 2, 50, 000. The broker charged 1% brokerage from the seller and 2% brokerage from the buyer. What is the total amount of brokerage received by the broker?
- (a) 7400
  - (b) 7500
  - (c) 6500
  - (d) None of these
- Q4.** What is the smallest number by which 1458 should be divided so that the quotient becomes a perfect square?
- (a) 3
  - (b) 4
  - (c) 5
  - (d) 2

- Q5.** Simplify:  $(4m^2 - 3m - 5) - (2m^2 - 2m - 3) + (2m^2 + 2m + 5)$
- (a)  $4m^2 + m - 3$
  - (b)  $4m^2 + m + 3$
  - (c)  $4m^2 - m - 3$
  - (d) None of these

**Paragraph**

(This paragraphs is for questions 6 to 9)

The following pie graph shows the information about participation of 60 students of a school in various games during the sports day.



Answer the questions below based on the graph.

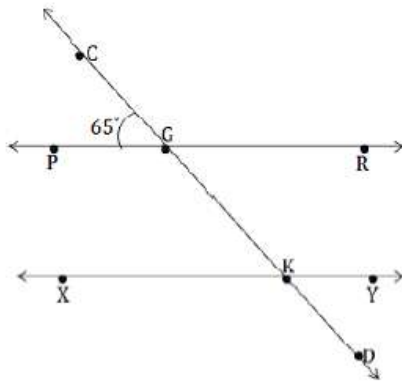
- Q6.** How many student took part in the lemon and spoon race?
- (a) 14
  - (b) 16
  - (c) 15
  - (d) None of these
- Q7.** Which game had the least number of students?
- (a) High jump
  - (b) Spot put
  - (c) Running
  - (d) Long jump
- Q8.** Which game had the maximum number of students?
- (a) High jump
  - (b) Spot put
  - (c) Running
  - (d) Long jump

**Q9.** How many students took part in shot put?

- (a) 10
- (b) 20
- (c) 30
- (d) 40

**Q10.**  $\overline{PR} \parallel \overline{XY}$  and  $\overline{CD}$  is the transversal. If  $m\angle PGC = 65^\circ$ , find the  $\angle GKY$

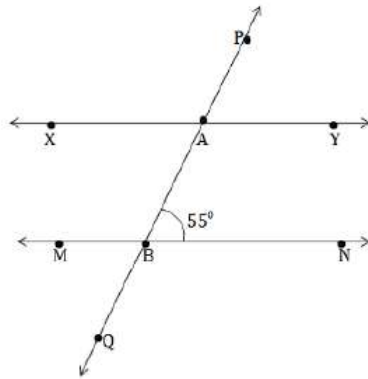
- (a)  $120^\circ$
- (b)  $110^\circ$
- (c)  $115^\circ$
- (d) None of these



**Q11.** A trader buys some TVs at a 20% rebate on the printed price of Rs. 18,000. For a long time he could not sell any TV. So he sells it by giving a rebate of Rs. 2700 on the printed price. What amount of profit or loss does he make? Calculate the percentage rebate for the customer.

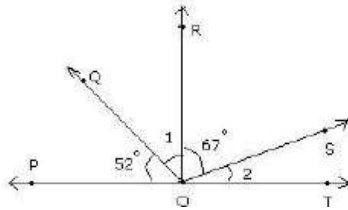
- (a) 10%
- (b) 15%
- (c) 25%
- (d) 20%

**Q12.**  $\overline{XY} \parallel \overline{MN}$  and  $\overline{XY}$  is the transversal  $\overline{PQ}$  intersects  $\overline{XY}$  at point A and  $\overline{MN}$  at point B. If  $m\angle NBP = 55^\circ$ , find the  $\angle PAX$ ?



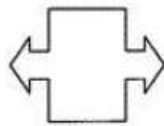
- (a)  $110^\circ$
- (b)  $120^\circ$
- (c)  $115^\circ$
- (d)  $125^\circ$

**Q13.** If RO is the perpendicular to PT, then find the measure of angles 1 and 2 in the figure below:



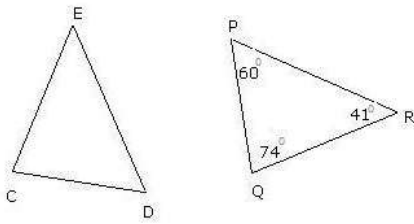
- (a)  $38^\circ$
- (b)  $48^\circ$
- (c)  $26^\circ$
- (d) None of these

**Q14.** Draw and count the number of lines of symmetry for the following figure.



- (a) 1
- (b) 2
- (c) 3
- (d) 4

**Q15.** In the figure below,  $\triangle CDE \cong \triangle QPR$ . What is  $m\angle D$ ?

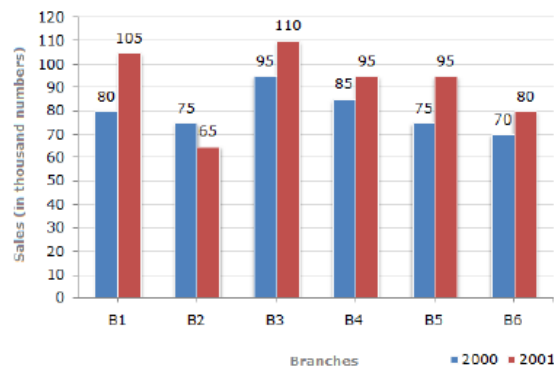


- (a)  $45^\circ$   
 (b)  $90^\circ$   
 (c)  $60^\circ$   
 (d) None of these
- Q16.** What should be added to  $x^2 + xy + y^2$  to obtain  $2x^2 + 3xy$  ?
- (a)  $x^2 - 2xy - y^2$   
 (b)  $x^2 - 2xy + y^2$   
 (c)  $x^2 + 2xy + y^2$   
 (d)  $x^2 + 2xy - y^2$
- Q17.** It takes  $\frac{2}{5}$  yards of material to make a shirt. How many yards of material will be required to make 6 shirts?
- (a)  $\frac{12}{5}$   
 (b)  $\frac{11}{5}$   
 (c)  $\frac{13}{5}$   
 (d) None of these

### Paragraph

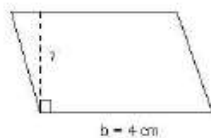
(This paragraphs is for questions 18 to 20)

The bar graph given shows the sales of books (in thousands) from six branches of a publishing company during two consecutive years, 2000 and 2001.



- Q18.** What is the ratio of the total sales of branches B2 for both years to the total sales of branch B4 for both years?
- (a) 7 : 3  
(b) 7 : 9  
(c) 9 : 7  
(d) 3 : 7
- Q19.** What is the average sale of all the branches (in thousands) for the year 2000?
- (a) 70  
(b) 60  
(c) 80  
(d) 100
- Q20.** Total sales of branches B6 for both the years are what percent of the total sales of branch B3 for both the years?
- (a) 73.15%  
(b) 72.17%  
(c) 61.17%  
(d) 73.17%

- Q21.** In the figure given below, the area of the parallelogram is  $24 \text{ cm}^2$  and the base is 4 cm. Find the height.



- (a) 6 cm  
(b) 4 cm  
(c) 5 cm  
(d) None of these

- Q22.** The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?
- (a) 1800
  - (b) 1500
  - (c) 2000
  - (d) None of these
- Q23.** Which of the following is the greatest rational number?
- (a)  $15/7$
  - (b)  $15/8$
  - (c)  $15/10$
  - (d)  $15/12$
- Q24.** Mean of 11, 10, 12, 12, 9, 10, 14, 12 and 9 is
- (a) 20
  - (b) 10
  - (c) 11
  - (d) 14
- Q25.** If on adding 9 to twice of a whole number we get 31, then the whole number is
- (a) 21
  - (b) 16
  - (c) 17
  - (d) 11
- Q26.** A square has an angle of rotation of
- (a)  $50^\circ$
  - (b)  $180^\circ$
  - (c)  $90^\circ$
  - (d)  $60^\circ$
- Q27.** A 2D skeleton outline used to make a 3D shape is called which of the terms listed below?
- (a) Net
  - (b) Sketch
  - (c) Outline
  - (d) Border

- Q28.** The linear equation  $p/3 = q$  can be written in statement form as
- (a) 3 times p is q
  - (b) One – third of p is q
  - (c) q times p is 3
  - (d) one – ninth of q is p
- Q29.** Area of a circle whose radius is 5 cm is \_\_\_\_\_  $\text{cm}^2$
- (a)  $20 \pi \text{ cm}^2$
  - (b)  $25 \pi \text{ cm}^2$
  - (c)  $30 \pi \text{ cm}^2$
  - (d) None of these
- Q30.** A rectangular park is 38 m long and 15 m wide. A path 3.5 m wide is constructed outside the park. Find the outer perimeter of the path.
- (a) 130 m
  - (b) 124 m
  - (c) 128 m
  - (d) 130 m