

BCM SCHOOL BASANT AVENUE, DUGRI, LUDHIANA

SESSION:2023-2024

CLASS -VII

SUBJECT –MATHEMATICS (041)

FEBRUARY ASSIGNMENT

ANSWER KEY

1 b

2 c

3 c

4 c

5 i Swimming

ii Canoeing

iii 35

6. Area of $\Delta ABC = \frac{1}{2} \times b \times h = \frac{1}{2} \times AC \times AB$

$= \frac{1}{2} \times 8 \times 15 = 60 \text{sq.cm}$

Area of $\Delta ABC = \frac{1}{2} \times b \times h = \frac{1}{2} \times BC \times AD$

$60 = \frac{1}{2} \times 17 \times AD$

Thus, $AD = 7.05 \text{ cm}$

$7. 2p + 18 = -4$

$2p = -4 - 18$

$2p = -22$

$p = -22/2$

$p = -11$

8. Given, Interest, $I = \text{Rs. } 540$

Principal, $P = \text{Rs. } 18000$

Time, $T = 3 \text{ years}$

We know, Interest = Principal \times Rate \times Time

$$\therefore \text{Rate} = \frac{\text{Interest} \times 100}{\text{Principal} \times \text{Time}}$$

$$= \frac{540 \times 100}{18000 \times 3}$$

$$= 1\%$$

9. From the figure, line l is parallel to m and a transversal passes through them.

Hence, $\angle y = 105^\circ$ (corresponding angles)

$$\angle x + \angle y = 180^\circ \quad (\text{Linear Pair})$$

$$\angle x = 180^\circ - 105^\circ$$

$$\angle x = 75^\circ$$

10. $x^3 - 3x^2y + 2xy^2 + 8xy + 9$

Substituting $x = -3, y = 1$

$$(-3)^3 - 3(-3)^2(1) + 2(-3)(1)^2 + 8(-3)(1) + 9$$

$$= -27 - 27 - 6 - 24 + 9$$

$$= -54 - 30 + 9$$

$$= -75$$