

MATHEMATICS ASSIGNMENT FOR STD. VII

Q.1. In an election between two candidates, one candidate secured 43% of the total votes polled and lost the election by 4900 votes. Find the total number of votes polled.

[Ans. 35,000]

Q.2. A train 225 m long, travels at a uniform speed of 54 km/hr. How much time will it take to pass:

(a) a telegraph post? [Ans. 15 sec]

(b) a platform 150 m long? [Ans. 25 sec]

(c) a bridge 105 m long? [Ans. 22 sec]

Q.3. A man takes 150 steps in walking 120 metres. Find his speed in:

(a) m/s, and, (b) km/hr, if, he takes 3 steps in one second.

[Ans. (a) 2.4 m/s (b) 8.64 km/hr]

Q.4. If $a = 3x - 5y$, $b = 6x + 3y$ and $c = 2y - 4x$. Find $2a - 3b + 4c$.

[Ans. $-28x - 11y$]

Q.5. Find the angle if its supplement is 3 times its complement.

[Ans. 45°]

Q.6. Find the decimal expression of $7/15$.

[Ans. 0.47 (Correct to 2-decimal places)]

Q.7. Subtract $12x + 3y - z$ from the sum of $7x + 4y - 5z$ and $6x - 7z - 8$.

[Ans. $x + y - 11z - 3$]

Q.8. The perimeter of the sides of a triangle is $8y^2 - 9y + 4$ and its two sides are $3y^2 - 5y$ and $4y^2 + 12$. Find its third side.

[Ans. $y^2 - 4y - 8$]

Q.9. How much bigger is $5x^2y^2 - 18xy^2 - 10x^2y$ than $-5x^2 + 6x^2y - 7xy$.

[Ans. $5x^2y^2 - 18xy^2 - 16x^2y + 5x^2 + 7xy$]

Q.10. What must be added to $x^4 - x^3 + x^2 + x + 3$ to obtain $x^4 + x^2 - 1$?

[Ans. $x^3 - x - 4$]

Q.11. How much smaller is $15x - 18y + 19z$ than $22x - 20y - 13z + 26$.

[Ans. $7x - 2y - 32z + 26$]

Q.12. Construct a triangle ABC, $BC = 8.4$ cm, angle B = $67\frac{1}{2}^\circ$ and angle C = 45° .

***** ALL THE BEST *****