

+liba
IX-C
130

A.E.S.Dr.K.R.B.M. Sr Sec SCHOOL
CLASS IX MATHEMATICS (2017-18)
PRE MID TERM MM: 40; TIME: 2HRS

Q1. Work out or answer the following: $10 \times 1 = 10$

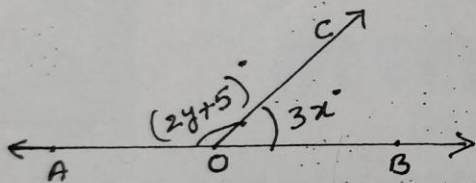
1. Write two rational numbers between $\frac{-3}{11}$ and $\frac{8}{11}$.
2. Express in $\frac{p}{q}$ form: $0.\overline{15}$
3. Find the value of $p(x) = 5x^2 - 3x + 7$ at $x = 1$.
4. Find the zero of the polynomial $p(x) = 2x + 5$.
5. State Euclid's 4th Postulate.
6. Factorise: $2x^2 + 7x + 3$.
7. One angle is equal to three times its supplement. Find the measure of the angle.
8. If a wheel has six spokes equally spaced, then find the measure of the angle between the adjacent spokes.
9. Divide $x^3 + 1$ by $x + 1$. Find the remainder. (apply remainder theorem)
10. Verify $x = 1$ is the zero of the polynomial $3x + 1$.

Q2. Do the following: $(5 \times 2 = 10)$

11. State whether true or false and give reasons. Every integer is a whole number.

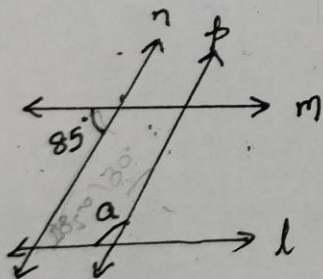
12. Expand $(3a + b)^3$

13.



If $x = 25^\circ$, what is the value of y ?

14.



If $n \parallel l$ and $m \parallel l$, find the value of 'a'.

15. How many lines can pass through a single point?

Q3. Do the following: $(5 \times 4 = 20)$

16. Construct $\sqrt{3.5}$. On number line.

17. Visualise 2.665 on number line

18. Evaluate 99^3

19. Verify: $x^3 + y^3 = (x + y)(x^2 - xy + y^2)$

20. Euclid's 5th axiom is called "Universal Truth". Explain.