

Grade 9

mathematics

covid – 19 - weekly school

December – 4th week

01. Consider the number sequence with n^{th} term $5n-2$. 63, is this a term of this number sequence?

02. Simplify $1011_{\text{two}} - 101_{\text{two}}$

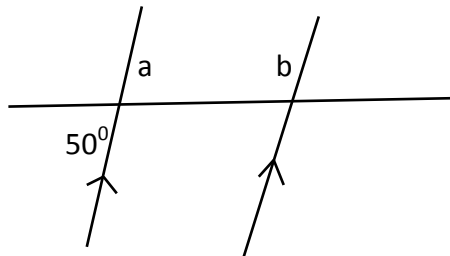
03. Simplify $1/2 + 3/7$ of $2/3$

04. A discount of 8% offered when an electrical appliance set of market price rs.12000 is purchased. How much needs to be paid when purchasing it?

05. Solve. $a/3 - 2 = 8$

06. Express the $(x+5)(x-3)$ product as a trinomial quadratic expression.

07. Find the values of a and b.



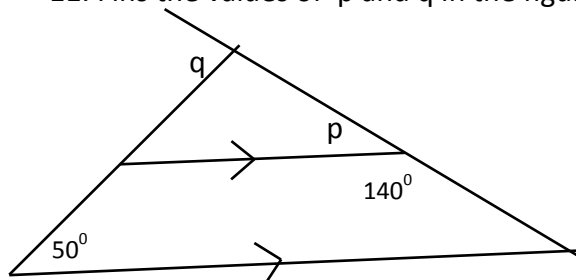
08. A cuboid shape tank of base area 240cm^2 is filled with 1.8l of water. Find the height of the container.

09. Simplify and express the answer in scientific notation.

$$5.23 \times 10^4 - 2.23 \times 10^4$$

10. The price of a milk toffee is 72 rupees. How many milk toffees can be bought for 20 rupees?

11. Find the values of p and q in the figure given below.



12. Solve. $x/4 = (x+3) / 5$

13. Find x in the $y = mx + c$ equation with y,m,c.

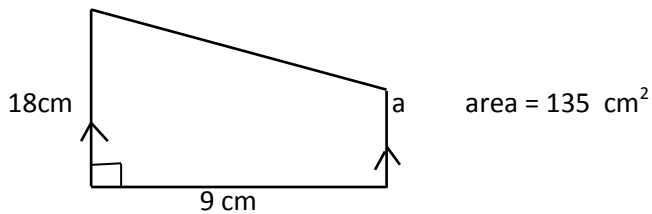
14. $\mathcal{E} = \{ \text{whole numbers between 0 and 10} \}$

$A = \{ \text{prime numbers between 0 and 10} \}$

Find $n(A')$

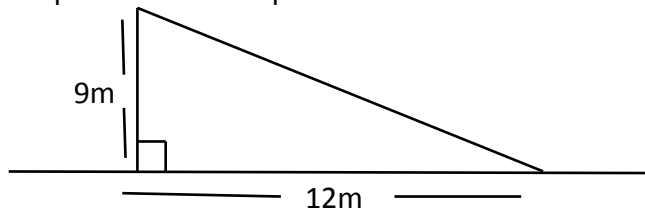
15. Find the values of b and c in $(x+3)(x+8) = x^2 + bx + c$

16. Find the length as indicated a in the figure given bellow.



17. The sum of the interior angles of polygon is 1440^0 . Find the number of sides of the polygon.

18. The figure indicated an iron post which was collapsed due to decay. Find the height of the post before collapsed.



19. There are 10 identical cards numbered from 1 to 10 in a box. When drawing a card at random from the box, find the probability of drawing a card with a prime number.

20. Simplify using indices.

$$\frac{(2p)^{-2} \times (2p)^3}{(2p)^4}$$