Grade 9
Mathematics
Covid-19 -Weekly School

December -1st Week

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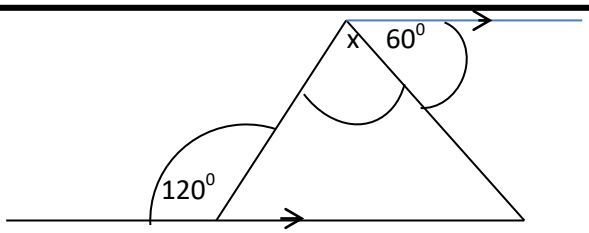
01. Write $3x^{-4}$ with positive indices.

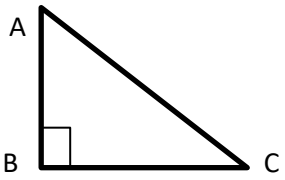
02. Factorize. $x(y+5)+7(y+5)$

03. Fine the value of **X** .



04. Simlify. $\frac{3}{7} \div \frac{9}{28}$ **of** $\frac{10}{18}$

05. Write the relationship between the sides of triangle ABC using Pythagorean relation.



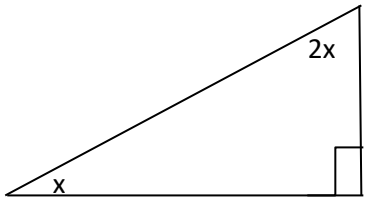
06. Expand . $(x+6)(x+3)$

07.If a person walked **800m** distance in **4** minutes at a constant speed , find the distance walked in **10** minutes.

08. Solve. $\frac{x}{12} = \frac{1}{6}$

09. A vendor buys a radio at **Rs. 6000** and sells it at **Rs. 7800** . Calculate the profit percentage .

10. Find the values of **x** and **2x**.



11. Simplify. $\mathbf{1101_{two} + 1010_{two}}$

12. Make $\mathbf{m}$ the subject in the formula $y=mx+c$.

13. Find the distance moved during one full rotation of a wheel of radius **14cm** .

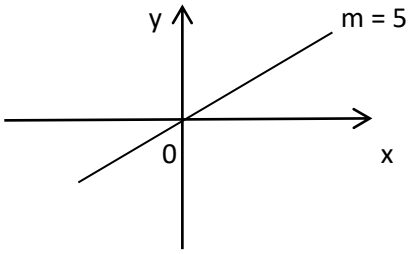
14. When a certain number is rounded off to the **nearest 10** , the number **60** is obtained . Find the **least** and the **greatest** value that this number can take.

15. Factorize and then find the value of the expression $\mathbf{99^2 - 1}$.

16.Find the value of **5p – 9q** when **p = 5** and **q =** $-\frac{1}{6}$.

17. The population of a certain city is **857995**. Write this number in **scientific notation**.

18 . Write the **equation** of the graph.

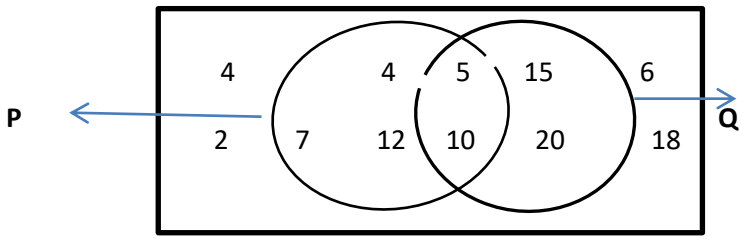


19. Write the general term of the number pattern **35 , 32 , 29 , 26 ,…** .

20. Considering the Venn diagram, write the elements of the sets given below,

i. **P**∩ $\boldsymbol{Q}$

ii. **P**∪ $\boldsymbol{Q}$



21. Find the probability of getting an **odd number** when an **unbiased** cubic die with its faces numbered **1 to 6** is rolled.

22. '**An exterior angle of a regular polygon is $70^{0,}$** . Is this statement true or false ? Give reasons.

23. How many seconds is $\frac{3}{5}$ **of 1 minute** ?

24. The capacity of a water tank is **$3m^3$** . Express it in **litres**.

25. Show that the circumference of a circle with its radius **2r** and the circumference of a circle with its radius **4r** is **1:2** .