



Zahira College

Online Assignment - 2020

Grade:11

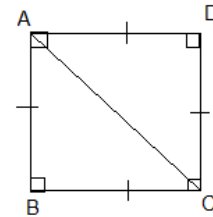
Subject: Mathematics

Admission No. :

Class:

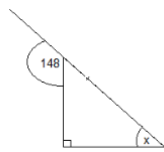
1. Factorise $x^2-9x+20$

2. If the length of the diagonal AC of the given square ABCD is $\sqrt{60}$ cm, Find the area of the square.



3. The nearest value of $\sqrt{8}$ is _____
{2.7, 2.8, 2.6, 2.9}

4. Find the value of x



5. Find the value of x+y without solving the pair of simultaneous equations

$$5x+3y=12$$

$$4x+6y=15$$

6. Express the set A using the set builder method

$$A=\{3,6,9,12\}$$

7. Find the value of x , $343^5 = 7^x$

8. Solve the inequality $6x - 8 \leq 4x - 2$ and write the largest value that x can be.

9. Find the gradient and intercept of the straight line $2y + 5x = 7$

10. Write $\frac{4}{25}$ as a decimal.

11. Find the value of $\log_2 \frac{1}{32}$

12. Evaluate $(3x^0)^3$

13. Write the set of integers belong to $-2 \leq x < 1$

14. If $3^2 \times 5^2 \times 7^2 = 11025$, find the value of $\sqrt{110.25}$

15. If $\lg 30 = 1.4771$, find the value of 0.003

16. Obtain the straight line which passes through the points (-1 , 5) and (2 , 3)

17. What is the quotient you get $x^2 - x - 30$ is divided by $(x + 5)$

18. Market price of an item is Rs. 50000. By paying ready cash a discount of 7.5 % is allowed. Find the selling price of the item for a customer who pays ready cash.

19. Simplify $\frac{x^2-4}{x-2} \div \frac{(x+2)^2}{2}$

20. Simplify $\sqrt{48} + \sqrt{27}$

21. When $a = 32$, $b = 4$ and $c = 1$ find the value of d in the formula $a = b(c + \sqrt{d + 1})$

22. Find the equation of a straight line which goes through the point (0 , 2) and is parallel to the line

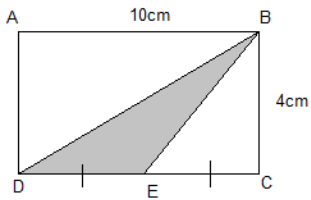
$$y = 2x + 4$$

23. Simplify $\frac{2}{a+1} - \frac{4}{1-a^2}$ and underline the correct answer

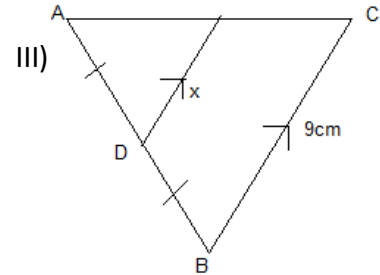
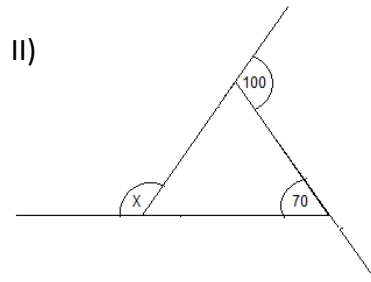
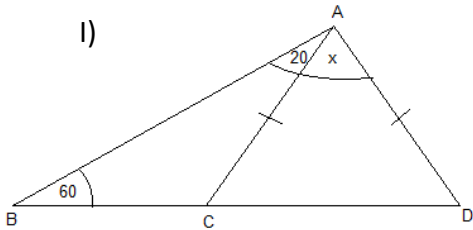
i. $\frac{2}{1-a}$ ii. $\frac{2}{a-1}$ iii. $\frac{-2}{(1-a)(1+a)}$

24. Solve $(x + 4)^2 = 49$.

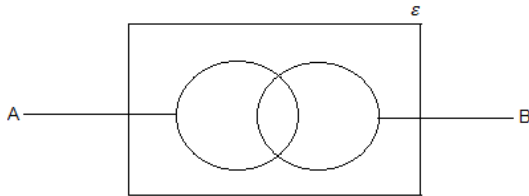
25. Find the area of $\triangle DBE$



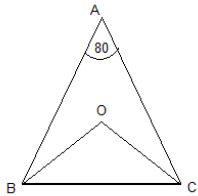
26. Find the value of x



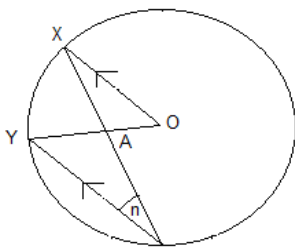
27. Shade the region $(A' \cap B)'$ in the venn diagram.



28. In the $\triangle ABC$, $AB=AC$, $\hat{A}BO=\hat{O}BC$ and $\hat{A}CO=\hat{O}CB$. If $\hat{B}AC=80^\circ$, find the value of $\hat{B}OC$.



29. Find in terms of n .



30. In the circle with centre O, $OC \perp AB$. If $AB=12\text{cm}$ and $DC = 2\text{cm}$, find the value of OA.

