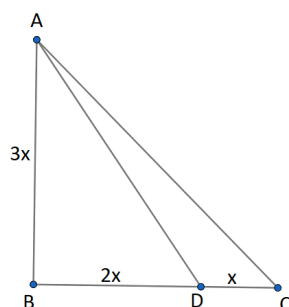
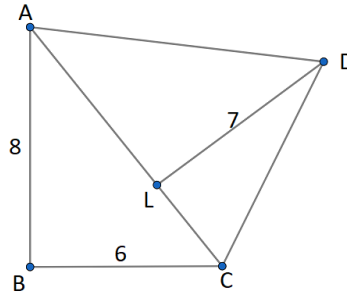


- Sum of two Natural numbers m and n is 5760 and difference between them is $\frac{1}{3}$ of the larger number. Find larger number.
- Find $\frac{26}{5} \times \frac{35}{13} \times \frac{337}{7} \times \frac{198}{66} =$.
- If $a : b = 7 : 3$, and $(a^2)(b^2) = 7056$, then $a - b = ?$
- $\sqrt{150}$ lies between natural numbers $m - 1$ and m . $\sqrt{250}$ lies between natural numbers $n - 1$ and n . $\sqrt{600}$ lies between natural numbers $p - 1$ and p . Find $m + n + p$.
- $\triangle ABC$ is right angled triangle as shown. $DC = x, DB = 2x, AB = 3x$, if $AC = 3\sqrt{26}$ find AD .

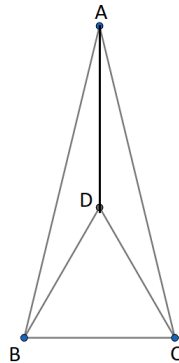


- Let $A = 75\%$ of 60% of 40 and $B = 40\%$ of 120% of 50. Find $A + B$.
- Let $\frac{m}{n} = 4$, Find $\frac{2m^2 + 8n^2}{m^2 - 6n^2}$.
- Find $\frac{\sqrt{5.29} + \sqrt{13.69}}{\sqrt{0.0001} \times \sqrt{0.36}}$.
- A number consists of 2 digits. The digit at unit's place is 3 times that in 10's place. If the digits are interchanged a new 2 digit number is formed. Let K be this new number. Also $K - 15$ is equal to 2 times the original number. Find the original number.
- On real number line distance between points with coordinates $\frac{13}{7}$ and $\frac{5}{3}$ is D_1 and distance between points with coordinates $-\frac{97}{7}$ and $-\frac{11}{21}$ is D_2 . Find $\frac{D_2}{D_1}$.
- B has money equal to $\frac{3^{th}}{7}$ of A and C has money equal to $\frac{11^{th}}{3}$ of B's. In all, they have 2022 Rs. How much money does A have?

12. Sum of 7 consecutive odd numbers is 133. If we ignore first and last, what is the sum of remaining five?
13. $\square ABCD$ is such that $\angle ABC = 90^\circ$ and $\overline{DL} \perp \overline{AC}$. If $AB = 8$, $BC = 6$ and $DL = 7$ then find the area of the $\square ABCD$.



14. Which of the fraction is largest among $\frac{2}{5}, \frac{5}{11}, \frac{8}{17}$?
Report 10 if answer is $\frac{2}{5}$, 20 if answer is $\frac{5}{11}$, 30 if answer is $\frac{8}{17}$.
15. If $a + b + c = 0$ then $\left(\frac{a+b}{c} + \frac{b+c}{a} + \frac{c+a}{b}\right) \left(\frac{a}{b+c} + \frac{b}{c+a} + \frac{c}{a+b}\right)$ equals.
16. 15 workers make 30 machines in 8 days. Find the number of days needed by 30 workers to make 15 machines.
17. If A's score is 25% more than B's score, by what percent is B's score less than A ?
18. As shown in the figure, $\triangle DBC$ is an equilateral triangle and $\triangle ABC$ is an isosceles triangle, such that $m\angle A : m\angle D = 1 : 3$. Find $m\angle ADC$.



19. Find the difference in the sums of all two - digit odd numbers and two- digit even numbers.
20. Meaning of a^b is a multiplied to a , b times. For example $a^4 = a \times a \times a \times a$. If $775 = 5^x + 5^y + 5^z$ where x, y, z are natural numbers, find $x + y + z$.

Answers:

1	2	3	4	5	6	7	8	9	10
3456	2022	8	54	13	42	4	1000	39	70
11	12	13	14	15	16	17	18	19	20
674	95	59	30	9	2	20	150	45	9