

Devadhar's Academy of Excellence
(A Venture by Devadhar Classes for IIT aspirants)
ADMISSION TEST

Student Name : _____

Present School : _____

Board : _____

1. At 12% discount, the selling price of a pen is 13.20 Rs. what is its MRP?
a) 15Rs. b) 35Rs. c) 25Rs. d) 5Rs.
2. If $2Q + 3P = \frac{3P - Q}{2R}$ find 'P' when $R = -2$, $Q = 1$.
a) $\frac{-15}{7}$ b) $\frac{-7}{15}$ c) $\frac{-17}{5}$ d) $\frac{-7}{5}$
3. If $\sqrt{2} = 1.4$ and $\sqrt{3} = 1.7$ find $\sqrt{50} - \sqrt{18}$
a) 1.4 b) 3.8 c) 2.8 d) 0.8
4. If $(4)^{2x} = 8^{\frac{3}{5}}$. Find 'x'
a) $\frac{19}{25}$ b) $\frac{9}{25}$ c) $\frac{1}{20}$ d) $\frac{9}{20}$
5. If $x + y = 2xy$ & $x - y = 6xy$ Find 'x + 2y'.
a) $\frac{1}{4}$ b) $\frac{-1}{2}$ c) 0 d) $\frac{-1}{4}$
6. A's salary is 4 times salary of 'B'. If together both earn 3750 a month. Find salary of B.
a) 750Rs. b) 700Rs. c) 850Rs. d) 650Rs.
7. Solve for 'x' $5x + \frac{13}{2} = 19$
a) 2/5 b) 5/2 c) 19/2 d) 13/2
8. What number must be added to each term of the ratio 7 : 12 to make it 2 : 3?
a) 3 b) 5 c) 6 d) 4
9. The sum of two numbers is '7' and sum of their cubes is '133'. Find the sum of their squares.
a) 92 b) 29 c) 17 d) 19
10. A wire is bent in the form of a square of area 576 cm^2 . If now the same wire is bent in the form of rectangular whose adjacent side differ by 4 cm, find the area of rectangle.
a) 275 cm^2 b) 572 cm^2 c) 527 cm^2 d) 372 cm^2
11. A square is inscribed in a circle of radius 7 cm find the area of square.
a) 98 cm^2 b) 89 cm^2 c) 144 cm^2 d) 94 cm^2
12. Each of two equal side of a triangle is 3 cm less than twice the third side. If perimeter of the triangle is 69 cm. find the third side.
a) 69cm b) 15cm c) 51cm d) 25cm

13. The ten's digit of a two digit number exceeds its unit's digit by 4. If the ten's digit and units digit are in the ratio 3 : 1, Find the number.
a) 61 b) 26 c) 62 d) 63
14. A sum triples itself at simple interest in 10 years. What is the rate of interest per annum?
a) 10% b) 30% c) 40% d) 20%
15. In mathematics exam 'A' scores 64%, 'B' scored 80 %, % score of C is such that the average score of three is 76%. If maximum marks were 200, how much 'C' has scored?
a) 168/200 b) 178/100 c) 288/200 d) 150/210
16. Cash of 80 lakh is to be distributed to A. B and C in the ratio 1 : 3 : 4. How much cash 'B' will get?
a) 10 b) 20 c) 30 d) 40