

Name :
Class: VIII

Subject :Maths

- 1) What least number should be subtracted from 4568 so that the resulting number becomes a perfect square?
- 2) Find the smallest number by which 29160 should be divided so that the quotient becomes a perfect cube.
- 3) Three numbers are in the ratio 1 : 2 : 3. The sum of their cubes is 62208. Find the numbers.
- 4) In what manner can 2304 plants be arranged, so that it gives the appearance of a square?
- 5) The volume of the cube is 13.824 cubic meters. Find the side of the cube.
- 6) The sum of two numbers is 90 and the greater number exceeds twice the smaller by 15. Find the numbers.
- 7) The digit at the tens place of a 2-digit number is three times the digit at ones place. If the sum of this number and the number formed by reversing its digits is 88, find the number.
- 8) Solve the following equations by using cross-multiplication:
- 9) $\frac{2}{3x} - \frac{3}{2x} = \frac{1}{12}$
- 10) $\frac{x+2}{3} - \frac{x+1}{5} = \frac{x-3}{4} - 1$
- 11) $\frac{x+3}{x-3} + \frac{x+2}{x-2} = 2$
- 12) The father is 24 years older than his daughter. In 4 years, he will be thrice as old as his daughter. Find their present ages.
- 13) The length and breadth of a rectangle exceeds its breadth by 9 cm. If the length and breadth are each increased by 3 cm, the area of the new rectangle becomes 84 cm² more than that of the original rectangle. Find the length and breadth of the given rectangle.
- 14) Find the smallest square number that is divisible by each 8, 15, 20.
- 15) The area of a square field is 5184m². Find the side of the square.
- 16) Evaluate $\sqrt[3]{(-64/343)}$
- 17) The ages of Rahul and Haroon are in the ratio 5 : 7. Four years later the sum of ages will be 56 years. What are their present ages?
- 18) Write a Pythagorean triplet whose one number is 14.
- 19) Find 4 rational numbers between $\frac{2}{3}$ & $\frac{3}{4}$.
- 20) A man's age is three times his son's age. Ten years ago, he was five times his son's age. Find their present ages.
- 21) How many sides does a regular polygon have if each of its interior angle is 165°.
- 22) The denominator of a rational number is five more than its numerator. If three is added to both numerator and the denominator, the numbers become $\frac{1}{2}$. Find the rational number.

- 23) The length of a rectangle is twice its breadth. If the perimeter of the rectangle is 156cm . find its dimensions.
- 24) In a school choir 3481 students line up to form a square. Find the number of students in each row.
- 25) A number multiplied by itself gives the product 33.8724. Find the number.
- 26) Find the square root of 0.008281.
- 27) The product of two rational numbers is $\frac{28}{121}$. If one of the numbers is $\frac{2}{3}$, find the other number.
- 28) The area of a rectangular field is $75\frac{3}{4}$ sq. m. If its breadth is $12\frac{5}{8}$ m, find its length.
- 29) PQRS is a rectangle, whose diagonals $PR = 2x + 4$ and $QS = 3x + 1$. Find the value of x .
- 30) How many sides will a regular polygon have if the measure of each interior angle is 144° .
- 31) How many sides will a regular polygon have if the measure of each exterior angle is 60° .
- 32) A wall of length 25 m, width 64 cm and height 2 m is to be constructed by using bricks, each of dimension 20 cm, 10 cm and 8 cm. How many bricks will be needed to construct the wall?
- 33) A rectangular piece of paper is 44 cm long and 20 cm broad. It is rolled along its length to form a cylinder. Find the volume of the cylinder so formed.
- 34) The area of four walls of a room is 51 m^2 . If the room is 5 m long and 3.5 m wide, find the height of the room.
- 35) The total surface area of a cuboid is 40 m^2 and its lateral surface area is 26 m^2 . Find the area of the floor.
- 36) A rectangular piece of paper is 44 cm long and 20 cm broad. It is rolled along its length to form a cylinder. Find the volume of the cylinder so formed.

