

1. The radius of the base of a cone is 7 cm, the slant height is 10 cm. Find its lateral surface area.
2. Write a step-by-step procedure for simple interest for 5 years in which Principle = Rs. 5,000 at Rate of 10% per year. Draw the flow chart also.
3. If $A = \{1,2,3\}$, $B = \{3,4,5\}$, $C = \{4,6\}$, show that $A \times (B \cup C) = (A \times B) \cup (A \times C)$.
4. A top (toy) is of the shape of a cone over a hemisphere. The radius of the hemisphere is 3.5 cm. The total height of the top is 15.5 cm. Find the total surface area of the top.
5. Draw Venn diagram of $A - B$.
6. What are the major components of a computer?
7. The product of a number and itself is 3969. Find the number.
8. What is the slope of the line $2x + 4y + 3 = 0$?
9. Out of 120 members of a class, 50 play cricket, 60 play football, 48 play hockey, 18 play cricket and hockey, 20 play cricket and football, 24 play hockey and football and 10 play all the three games. Using Venn diagrams or otherwise answer the following.
10. Solve $x(x + 1)(x + 2)(x + 3) = 120$.