

Class VIII (Math Sample Paper)
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1. Multiply the binomials :-
(a) $(2x+5)$ and $(4x-3)$ (b) $(7x - 6)$ and $(6x + 5)$
2. Product with suitable identity :-
(a) $(3x + 5)(3x + 5)$ (b) $(5x - 7)(5x - 7)$
(c) $(7a - 2b)(7a + 2b)$ (d) $(3x/2 - 4y/3)(3x/2 + 4y/3)$
3. Evaluate the following using identities :-
(a) 101^2 (b) 9.6^2 (c) 11.5^2 (d) 106×94
4. Add: $7xy + 5yz - 3zx$, $4yz + 9zx - 4y$, $-3xz + 5x - 2xy$.
5. Subtract $5x^2 - 4y^2 + 6y - 3$ from $7x^2 - 4xy + 8y^2 + 5x - 3y$.
6. What should be added to $x^2 + xy + y^2$ to obtain $2x^2 + 3xy$?
7. What should be taken away from $3x^2 - 4y^2 + 5xy + 20$ to obtain $-x^2 - y^2 + 6xy + 20$?
8. A suitcase with measures 80 cm 48 cm 24 cm is to be covered with a tarpaulin cloth. How many meters of tarpaulin of width 96 cm is required to cover 100 such suitcases?
9. Find the side of a cube whose surface area is 3174 cm^2 .
10. Daniel is painting the walls and ceiling of a cuboidal hall with length, breadth and height of 15 m, 10 m and 7 m respectively. From each can of paint 100 m^2 of area is painted. How many cans of paint will she need to paint the room?
11. The lateral surface area of a hollow cylinder is 4224 m^2 . It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimeter of rectangular sheet?
12. A company packages its milk powder in cylindrical container whose base has a diameter of 14 cm and height 20 cm. Company places a label around the surface of the container (as shown in figure). If the label is placed 2 cm from top and bottom, what is the area of the label?
13. Diameter of cylinder A is 7 cm and the height is 14 cm. Diameter of cylinder B is 14 cm and height is 7 cm. Whose volume is greater?
14. A cuboid is of dimensions 60 cm X 54 cm X 30 cm. How many small cubes with side 6 cm can be placed in the given cuboid?
15. Find the height of the cylinder whose volume is 154 cm^3 and diameter of the base is 14 cm.
16. If each edge of a cube is doubled,
 - (i) How many times will its surface area increase?
 - (ii) How many times will its volume increase?