Mensuration: Worksheet -4

1. A square and an equilateral triangle have equal perimeters. If the diagonal of the square is $6\sqrt{2}$ cm, the are of the triangle is _ _ _

   [   ]

   a) $16\sqrt{2}$ cm²   b) $16\sqrt{3}$ cm²   c) $12\sqrt{2}$ cm²   d) $12\sqrt{3}$ cm²

2. If the diagonals of a rhombus are 24 cm and 10cm then the perimeter of the rhombus will be _ _ _ _ _ _ _   [   ]

   a) 68 cm   b) 60 cm   c) 50 cm   d) 52 cm

3. The area of a parallelogram is 70 cm² and its altitude is 7cm then the perimeter of a rectangle of equal area standing on the same base is

   [   ]

   a) 17 cm   b) 34 cm   c) 28 cm   d) 40 cm

4. Three squares have perimeters of 12m, 20m and 24 m respectively. If a rectangle is constructed whose area is equal to the combined area of the three squares such that its width is 7m, then the length of the rectangle is _ _ _ _ _ _ _ _ _   [   ]

   a) 6 m   b) 8 m   c) 10 m   d) 12 m

5. The area of a rectangle is 150 sq.m. and its perimeter is 50 m. Then its dimensions are :   [   ]

   a) 20, 5   b) 30, 5   c) 10, 15   d) none

6. If each side of a rectangle is increased by 50% then its area will be increased by   [   ]

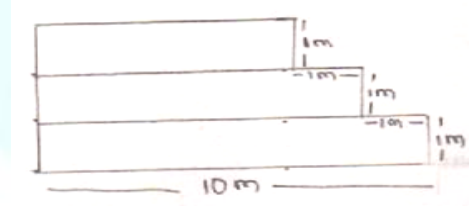   a) 150%   b) 120%   c) 125%   d) no change

7. A lawn 120 m by 80 m is surrounded by a path of 3m width. The area

of the path is   [   ]

   a) 1164 m²   b) 1236 m²   c) 8364 m²   d) 10836 m²

8. The area of the given figure is _ _ _ _ _   [   ]

   a) 28 m²   b) 27 m²

   c) 29 m²   d) 30 m²

9. If a rectangle of sides 5 cm and 15 cm is to be divide into three

   squares of equal area then the side of the squares will be   [   ]

   a) 4 cm   b) 6 cm   c) 7 cm   d) none

10. The area of a quadrilateral ABCD in which AB = 3 cm; BC = 4 cm;

    CD = 6 cm; DA = 5 cm and diagonal AC = 5 cm is   [   ]

    a) 15 cm²   b) 16 cm²   c) 17 cm²   d) 18 cm²

11. If the length and diagonal of a rectangle are 20 cm and 25 cm then

    its area is _ _ _ _ _ _ _ _ _ _   [   ]

    a) 200 cm²   b) 250 cm²   c) 300 cm²   d) 450 cm²