Math Worksheets

Equation of a Parabola

✍ **Write the equation of the following parabolas.**

1) Vertex (1, 2) and Focus (– 1, 2)

2) Vertex (3, 0) and Focus (2, 0)

3) Vertex (3, 2) and Focus (3, 0)

4) Vertex (1, 4) and Focus (1, 3)

5) Vertex (0, 5) and Focus (2, 5)

6) Vertex (4, 2) and Focus (4, 1)

7) Vertex (1, 3) and Focus (1, 6)

8) Vertex (5, 4) and Focus (8, 4)

9) Vertex (2, 1) and Focus (2, 8)

10) Vertex (3, 1) and Focus (0, 1)

Answers of Worksheets

Equation of a Parabola

1) $(y - 2)^2 = 8(1 - x)$

2) $y^2 = 4(3 - x)$

3) $(x - 3)^2 = 8(2 - y)$

4) $(x - 1)^2 = 4(4 - y)$

5) $(y - 5)^2 = 8x$

6) $(x - 4)^2 = 8 - 4y$

7) $(x - 1)^2 = 12(y - 3)$

8) $(y - 4)^2 = 12(x - 5)$

9) $(x - 2)^2 = 28(y - 1)$

10) $(y - 1)^2 = 12(3 - x)$