

Name : _____

Score : _____

Teacher : _____

Date : _____

Properties of Parabolas

Identify the following.

1) $y = -2x^2 + 4x + 70$

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:

4) $y = 5x^2 - 40x + 75$

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:

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

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:

5) $x = 2y^2 + 24y + 70$

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:

3) $y = (x + 6)^2 + 2$

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:

6) $x = -2y^2 - 20y - 32$

Min/Max value:

Latus:

y-int:

x-int:

Vertex:

Axis of Symmetry:

Opens:



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Properties of Parabolas

Identify the following.

1) $y = -2x^2 + 4x + 70$

Max value: 72

Latus Rectum: $\frac{1}{2}$ units

y-int: 70

x-int: 7 , -5

Vertex = (1 , 72)

Axis of Symmetry: $x = 1$

Opens: Down

4) $y = 5x^2 - 40x + 75$

Min value: -5

Latus Rectum: $\frac{1}{5}$ units

y-int: 75

x-int: 3 , 5

Vertex = (4 , -5)

Axis of Symmetry: $x = 4$

Opens: Up

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

Min value: -2

Latus Rectum: $\frac{1}{2}$ units

y-int: -4 , -2

x-int: 16

Vertex = (-2 , -3)

Axis of Symmetry: $y = -3$

Opens: Right

5) $x = 2y^2 + 24y + 70$

Min value: -2

Latus Rectum: $\frac{1}{2}$ units

y-int: -7 , -5

x-int: 70

Vertex = (-2 , -6)

Axis of Symmetry: $y = -6$

Opens: Right

3) $y = (x + 6)^2 + 2$

Min value: 2

Latus Rectum: 1 unit

y-int: 38

x-int: None

Vertex = (-6 , 2)

Axis of Symmetry: $x = -6$

Opens: Up

6) $x = -2y^2 - 20y - 32$

Max value: 18

Latus Rectum: $\frac{1}{2}$ units

y-int: -2 , -8

x-int: -32

Vertex = (18 , -5)

Axis of Symmetry: $y = -5$

Opens: Left

