Name : _____ Score : _____

Teacher : _____ Date : _____

Properties of Parabolas

Identify the following.

1) $y = 2(x + 5)^2 - 18$

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

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

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

3) $x = 2y^2 + 4y - 6$

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

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

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

5) $x = -3y^2 + 6y$

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

6) $x = 2y^2 + 12y + 16$

Min/Max value:
Latus:
y-int:
x-int:
Vertex:
Axis of Symmetry:
Opens:

Name : _____ Score : _____

Teacher : _____ Date : _____

Properties of Parabolas

Identify the following.

1) $y = 2(x + 5)^2 - 18$

Min value: -18
Latus Rectum: $\frac{1}{2}$ units
y-int: 32
x-int: -8 , -2
Vertex = (-5 , -18)
Axis of Symmetry: x = -5
Opens: Up

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

Min value: 2
Latus Rectum: 1 unit
y-int: 38
x-int: None
Vertex = (-6 , 2)
Axis of Symmetry: x = -6
Opens: Up

3) $x = 2y^2 + 4y - 6$

Min value: -8
Latus Rectum: $\frac{1}{2}$ units
y-int: -3 , 1
x-int: -6
Vertex = (-8 , -1)
Axis of Symmetry: y = -1
Opens: Right

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

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

5) $x = -3y^2 + 6y$

Max value: 3
Latus Rectum: $\frac{1}{3}$ units
y-int: 2 , 0
x-int: 0
Vertex = (3 , 1)
Axis of Symmetry: y = 1
Opens: Left

6) $x = 2y^2 + 12y + 16$

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