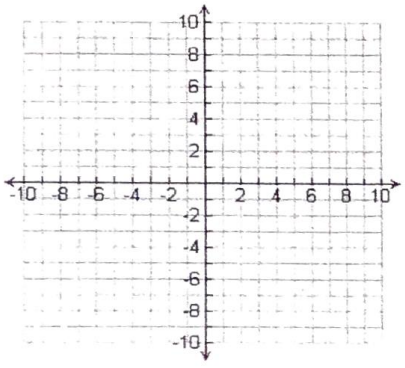
Converting Standard to Vertex Form HWK

Name: _____

1. $f(x) = x^2 + 14x + 48$

x	y



a= ____ b = _____ c= ____

a = ___ h = _____ k = ___

vertex form: _____

Opens: up or down

Vertex: _____

Max or Min: _____

Axis of symmetry: _____

X-Intercept: _____

Y – Intercept: _____

Rate of Change from x = - 8 to x = - 6

Domain: _____

Range: _____

End behavior : As x → - ∞, y →

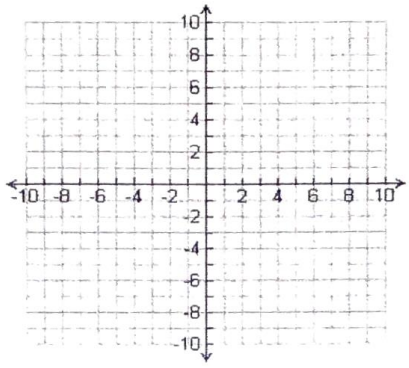
x → ∞, y →

Interval of Increase: _____

Interval of Decrease: _____

2. $f(x) = -x^2 + 14x - 49$

x	y



a= ____ b = _____ c= ____

a = ___ h = _____ k = ___

vertex form: _____

Opens: up or down

Vertex: _____

Max or Min: _____

Axis of symmetry: _____

X-Intercept: _____

Y – Intercept: _____

Slope from x= 7 to x = 9

Domain: _____

Range: _____

End behavior : As x → - ∞, y →

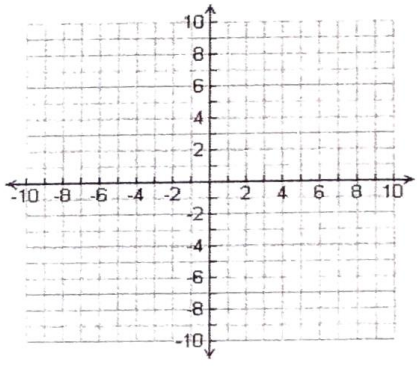
x → ∞, y →

Interval of Increase: _____

Interval of Decrease: _____

3. $f(x) = -2x^2 + 16x - 34$

x	y



a= ____ b = _____ c= ____

a = ___ h = _____ k = ___

vertex form: _____

Opens: up or down

Vertex: _____

Max or Min: _____

Axis of symmetry: _____

X-Intercept: _____

Y – Intercept: _____

Rate of Change from x = 2 to x = 3

Domain: _____

Range: _____

End behavior : As x → - ∞, y →

x → ∞, y →

Interval of Increase: _____

Interval of Decrease: _____

Convert the following from standard form to vertex form.

1. $Y = x^2 + 14x + 11$

2. $Y = x^2 - 8x + 10$

2. $Y = 2x^2 + 4x - 5$

4. $Y = x^2 + 12x + 6$

5. $y = x^2 - 4x + 15$

6. $Y = x^2 - 4x + 6$