

$$a = 1$$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Learning Goal 3.3**

Convert standard form of the quadratic equation to vertex form by completing the square.

**Assignment**

Convert the following functions into vertex form of the equation.

a.  $a(x) = x^2 - 8x + 10$

b.  $b(x) = x^2 - 10x + 3$

c.  $c(x) = x^2 + 12x + 15$

d.  $d(x) = x^2 + 16x + 5$

e.  $y = x^2 + 16x - 3$

f.  $f(x) = x^2 + 10x + 3$

g.  $g(x) = x^2 - 12x - 7$

h.  $h(x) = x^2 + 4x + 15$

i.  $y = x^2 - 6x + 11$

j.  $j(x) = x^2 - 14x + 5$

k.  $k(x) = x^2 + 11x + 10$

l.  $y = x^2 - 3x + 12$

m.  $m(x) = x^2 + 5x + 15$

n.  $n(x) = x^2 - 7x - 5$

o.  $y = x^2 + x + 9$

p.  $p(x) = x^2 + 7x + 2$

q.  $q(x) = x^2 - 5x + 1$

r.  $r(x) = x^2 - 11x + 4$

s.  $s(x) = x^2 + 9x - 6$

t.  $t(x) = x^2 - 13x + 20$