Vertex to Standard Form of a Quadratic

Name:_____

Convert the following equations into standard form of a quadratic.

1) $y = 3(x+1)^2 - 4$

2) $y - 20 = \frac{-2}{7}(x-7)^2$

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

4) $y + 6 = \frac{3}{2}(4x-6)^2$

5) $y - 3 = \frac{-3}{4}(x-6)^2$

6) $y = -8(2x-1)^2 + 12$

Write the following equations in standard form and find the x-coordinate of the vertex of each.

7) $y = -5x + 4x^2 + 6$

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

9) $x^2 - y = 9x + 3$

10) $6 + 2y = 8x - 12x^2$