Math-2   Name_____ ID: 1

SM2 HW #5-4 (Find Zeroes of Vertex Form)   Date_____ Period____

Find the "zeroes" of the equations.

1) $y = x^2 - 24$ 2) $y = x^2 - 76$

3) $y = x^2 - 81$ 4) $y = x^2 + 86$

5) $y = 3x^2 - 48$ 6) $y = 2x^2 - 32$

7) $y = 2x^2 + 16$ 8) $y = 5x^2 - 225$

9) What is the equation of a line through: $(5, 7)$ and perpendicular to the line $y = \dfrac{2}{3}x - 5$

10) Find the equation of a line through: $(2, 1)$ and $(-3, 1)$

11) Find the zeroes.   12) Find the zeroes.

$y = -3(x - 4)^2 + 6$ $y = 4(x + 5)^2 - 36$

13) Find the zeroes.

$$y = -7(x - 6)^2 - 21$$

14) Find the zeroes.

$$y = 2(x + 8)^2 - 48$$

For each of the following equations:
a) What is the y-intercept?
b) Factor each completely.
c) What are the x-intercepts?

15) $y = 2x^2 + 7x + 6$

16) $y = 6x^2 - 14x + 4$