Algebra II
Review Test Chapter 6

Solve by Factoring

1) $x^2 - x - 12 = 0$

2) $x^2 - 3x - 4 = 0$

3) $x^2 = 25$

4) $4x^2 - 17x + 4 = 0$

Solve using the Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

5) $x^2 - x - 12 = 0$

6) $4x^2 - 17x + 4 = 0$

7) $-3x^2 + 4x - 4 = 0$

Find vertex, axis of symmetry, Direction by using $f(x) = a(x-h)^2 + k$

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

9) $f(x) = -2(x-2)^2 - 2$

10) $f(x) = x^2 + 6x - 3$

11) $f(x) = 3x^2 - 18x + 11$

12) The monthly incomes of 10,000 workers in Gahanna are distributed normally. Suppose the mean monthly income is $\$1250$ and the standard deviation is $\$250$.

a) How many workers earn more than $\$1500$ per month?

b) How many workers earn less than $\$750$ per month?

c) What percentage earn between $\$500$ and $\$1750$ a month?

d) What percentage of the workers earn less than $\$1750$ a month?