Mathematics 101 Worksheet 7.1, 7.2

Problems

1) Solve the equation by factoring.

a) $3x^2 + 4x = 0$

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

2) Solve the equation by using the square root property.

a) $(x - 2)^2 = 25$

b) $(3y - 1)^2 = 3$

3) Solve the equation by completing the square and applying the square root property.

a) $x^2 + 16x = 17$

b)$3x^2 + 2x = 1$

4) Determine the number of solutions for the equation by using the discriminant.

a) $x^2 - 5x = -6$

b) $10b + 1 = -25b^2$

c) $a^2 + a + 1 = 0$

5) Solve the equation by using the quadratic formula.

a) $y^2 - 4y + 1 = 0$

b) $6a(a - 1) = 10 + a$