

1) Solve the polynomial by using the graphing method. Then check each of your solutions algebraically.

$$x^2 - 8x + 7 = 0$$

Solution(s): _____, _____

Check:

2) Solve the polynomial by using the graphing method. Then check each of your solutions algebraically.

$$2x^4 - 5x^3 - 3x^2 = 0$$

Solution(s): _____, _____, _____

Check:

3) Completely factor the following polynomial. Then solve the polynomial.

$$x^3 - 6x^2 - 16x = 0$$

4) Completely factor the following polynomial. Then solve the polynomial.

$$6x^3 - 4x^2 - 10x$$

5) Factor and solve the following polynomial.

$$x^4 + 13x^2 + 36 = 0$$

6) Factor and solve the following polynomial.

$$x^4 - 10x^2 + 9 = 0$$

7) Write out the following formulas, equations or values.

Quadratic Formula: $x =$

sum of cubes:

$I =$

difference of cubes:

8) Factor and solve the following polynomial.

$$x^3 + 64 = 0$$

9) Factor and solve the following polynomial.

$$8x^3 - 125 = 0$$