

Assignment

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Date_____ Period____

Factor each.

1) $x^3 + 1 = 0$

2) $x^4 - 8x^2 - 9 = 0$

3) $x^2 - 25 = 0$

4) $x^2 + 6x + 9 = 0$

5) $x^2 - 3x + 2 = 0$

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

7) $x^2 + 2x - 15 = 0$

8) $x^3 - 64 = 0$

9) $x^3 - 4x^2 + 2x - 8 = 0$

10) $x^4 - x^2 - 56 = 0$

$$11) \ x^4 + 9x^2 + 20 = 0$$

$$12) \ x^4 + 13x^2 + 36 = 0$$

$$13) \ x^4 + 15x^2 + 54 = 0$$

$$14) \ x^2 - x - 20 = 0$$

$$15) \ x^3 + 125 = 0$$

$$16) \ x^4 + 11x^2 + 24 = 0$$

$$17) \ x^4 + 2x^2 - 24 = 0$$

$$18) \ x^3 + 8 = 0$$

$$19) \ x^2 - 9x + 20 = 0$$

$$20) \ x^3 - x^2 + 4x - 4 = 0$$

Answers to Assignment (ID: 1)

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|-----------------------------------|----------------------------------|------------------------------|
| 1) $(x + 1)(x^2 - x + 1) = 0$ | 2) $(x - 3)(x + 3)(x^2 + 1) = 0$ | 3) $(x - 5)(x + 5) = 0$ |
| 4) $(x + 3)^2 = 0$ | 5) $(x - 1)(x - 2) = 0$ | 6) $(x + 2)^2 = 0$ |
| 8) $(x - 4)(x^2 + 4x + 16) = 0$ | 9) $(x - 4)(x^2 + 2) = 0$ | 10) $(x^2 - 8)(x^2 + 7) = 0$ |
| 11) $(x^2 + 5)(x^2 + 4) = 0$ | 12) $(x^2 + 9)(x^2 + 4) = 0$ | 13) $(x^2 + 6)(x^2 + 9) = 0$ |
| 14) $(x - 5)(x + 4) = 0$ | 15) $(x + 5)(x^2 - 5x + 25) = 0$ | 16) $(x^2 + 8)(x^2 + 3) = 0$ |
| 17) $(x - 2)(x + 2)(x^2 + 6) = 0$ | 18) $(x + 2)(x^2 - 2x + 4) = 0$ | 19) $(x - 5)(x - 4) = 0$ |
| 20) $(x - 1)(x^2 + 4) = 0$ | | |