

Wednesday, January 10, 2017

1. Pass back tests
2. Correct Homework
3. More factoring

## Factoring Polynomials

$$1. \quad \frac{24x + 48y}{\frac{24}{24} \cdot x + \frac{24}{24} \cdot 2 \cdot y} \\ 24(x + 2y)$$

- ① Find GCF of each term
- ② Find what's in common
- ③ Write the common outside  
leftovers inside.

$$4.) \quad \frac{9x^2 - 3x}{3x \sqrt{3x} - 1 \sqrt{3 \cdot x}} \\ 3x(3x - 1)$$

$$11.) \quad \frac{4a^2b + 28ab^2 + 7ab}{ab(4a + 28b + 7)}$$

$$7 \cdot a = 0$$

$$a \cdot b = 0$$

$$1. \quad x(x + 3) = 0$$

$$x = 0$$

$$x + 3 = 0 \\ -3 \quad -3$$

$$x = -3$$

$$x = \{0, -3\}$$

$$2. \quad 3m(m - 4) = 0$$

$$\frac{3m}{3} = \frac{0}{3}$$

$$m = 0$$

$$m - 4 = 0 \\ +4 \quad +4$$

$$m = 4$$

$$m = \{0, 4\}$$

$$3. (r-3)(r+2) = 0$$

$$r-3=0 \quad r+2=0$$

$$+3 \quad +3 \quad -2 \quad -2$$

$$r=3$$

$$r=-2$$

$$r = \{-2, 3\}$$

$$6. \quad 5d^2 = 25d$$

$$-5d^2 \quad -5d^2$$

$$0 = 25d - 5d^2$$

$$5d(5-d) = 0$$

$$\frac{5d}{5} = \frac{0}{5} \quad \frac{5-d}{-5} = \frac{0}{-5}$$

$$d = 0$$

$$\frac{-d}{-1} = \frac{-5}{-1}$$

$$d = 5$$

1. Make the equation = 0

2. factor the terms.

3. solve for both terms.

$$8. \quad 5p - 15p^2 = 0$$

$$5p(1-3p) = 0$$

1. Factor

2. solve for each term.