

Do Now:

Factor each polynomial

$$1) \frac{5a}{5a} + \frac{10a^2}{5a}$$

$$5a(1 + 2a)$$

$$2) \frac{8x^2y}{4xy} - \frac{20xy^2}{4xy}$$

$$4xy(2x - 5y)$$

$$3) \frac{16t^2}{16} + \frac{48t}{16} - \frac{80}{16}$$

$$16(t^2 + 3t - 5)$$

Sep 27-7:55 AM

Homework Answers

- | | |
|--------------------------|---------------------------------|
| 1. $c(8c + 7)$ | 7. $x(2x^2 + 8x + 3 + 12x^3)$ |
| 2. $3n^2(n + 4)$ | 8. $n(4n^2 + 3n + 4)$ |
| 3. $3x(5x^4 - 6)$ | 9. $d(10d - 6d^2 + 35d^3 - 21)$ |
| 4. $4(-2x^4 + 5t^3 - 7)$ | 10. $n(12n^2 - 15n - 8)$ |
| 5. $6n(n^5 + 3n^3 - 4)$ | 11. $b(5b^3 - 15b^2 - 1 - 3b)$ |
| 6. $5m^2(m^2 - m + 1)$ | 12. $t(t^2 - 5t - 2 + 10t^4)$ |

Apr 24-6:47 AM

Steps to follow to factor out a Binomial GCF :

1. Locate the Common Binomial (Usually in parenthesis)
2. Circle All terms that are not the common Binomial
3. Express as the product of the two factors
(Common Binomial) ("Circled Terms")

Sep 27-8:00 AM

Factor each expression

$$1. \textcircled{3x}(x-1) + \textcircled{5}(x-1)$$

$$(x-1)(3x+5) \text{ OR } (3x+5)(x-1)$$

$$2. \textcircled{2x}(2x+7) - \textcircled{1}(2x+7)$$

$$(2x+7)(2x-1)$$

Feb 12-12:37 PM

Factor each expression

$$3. \textcircled{x^2} \textcircled{(4x-1)} + \textcircled{5} \textcircled{(4x-1)}$$

$$(4x-1)(x^2+5)$$

$$4. \textcircled{2x} \textcircled{(x-2)} - \textcircled{1} \textcircled{(x-2)}$$

$$(x-2)(2x-1)$$

$$2x(x-2) + 1(x-2)$$

$$(x-2)(2x+1)$$

Feb 25-9:21 AM

5. The area of a rectangle is represented by the polynomial $16x^2 + 56x$. The width of the rectangle is given by the monomial $8x$

$$\boxed{16x^2 + 56x} \cdot 8x$$

(a) give a binomial expression in terms of x for the length of the rectangle.

$$\frac{16x^2 + 56x}{8x}$$

$$\text{Length} = 2x + 7$$

(b) If the width of the rectangle is 80, what is the length of the rectangle?

$$\frac{8x}{8} = \frac{80}{8}$$

$$x = 10$$

$$\text{Length} = 2x + 7$$

$$2(10) + 7$$

$$20 + 7$$

$$\boxed{27}$$

Apr 16-7:04 AM