

### Use an ActivExpression:

State the degree of each.

1.  $9a^3b^4c$       degree = 8

2.  $5^2w^6x^9$       degree = 15

3.  $6a^4 + 9a^3 - 7a + 12$       degree = 4

4.  $-23w^3 - w^2 + 8w^5 - 30$       degree = 5

5.  $9x^2 + x - 7x^2 + 8x - 4 + 3x - 2x^2$       degree = 1

Give the name of each by it's degree

1.  $8x^3 - 7x^2$

A. Cubic

B. Linear

C. Constant

D. Quadratic

E. Binomial

2.  $4x$

A. Constant

B. Monomial

C. Linear

D. Quadratic

E. Cubic

Give the name of each by it's degree

3.  $5x^2 + 6x - 45$

A. Trinomial

B. Linear

C. Quadratic

D. Cubic

E. Constant

4.  $27.9$

A. Cubic

B. Quadratic

C. Linear

D. Monomial

E. Constant

Give the name of each by the number of terms.

1.  $3x - 7$

A. Linear

B. Monomial

C. Binomial

D. Constant

E. Trinomial

2.  $4a^3$

A. Monomial

B. Cubic

C. Trinomial

D. Binomial

E. Linear

Give the name of each by the number of terms.

3.  $7m^2 - 9m + 2$

- A. Binomial
- B. Quadratic
- C. Monomial
- D. Cubic
- E. Trinomial

Find the Greatest Common Factor of each polynomial

1.  $4k^6 - 18k^4 - 10k^2$

GCF

$2k^2$

2.  $-24e^6f^4 - 36e^3f^6 + 15e^2f^9$

$-3e^2f^4$

3.  $54a^5b^4c + 36a^3b^7c^4 - 63a^2b^{10}c^2$

$9a^2b^4c$

Factoring is the inverse of Distributive Property

Distributive Property  $\longrightarrow$  Multiplying

Factoring  $\longrightarrow$  Dividing

Fill in the blanks:

$10m^2 - 15m = \underline{\underline{5m}}(2m - 3)$

$6w^3 + 12w^2 = \underline{\underline{6w^2}}(w + 2)$

$8g^4 + 2g = \underline{\underline{2g}}(4g^3 + 1)$

SCF

### Factoring using the GCF

$$8x^3 + 6x^2 = \underline{2x^2} \left( \underline{4x+3} \right)$$

GCF                    What is left after  
                              dividing by GCF

### Factor using GCF

$$20Q^5 + 16Q^3 - 36Q = \underline{4Q} \left( \underline{5Q^4 + 4Q^2 - 9} \right)$$

### Factor using the GCF

$$15x^4y^2 + 18x^3y^3 + 21x^2y^5 = \underline{3x^2y^2} \left( \underline{5x^2 + 6xy + 7y^3} \right)$$

Hwk #26

due Monday

Sec 9-2

pages 463 - 464

problems 17, 18, 22, 23, 28, 29, 38, 39