

Unit 5 – 1

Name: _____

Name	Examples	Non-Examples
Monomial (one term)	1. $3x^4$ <i>degree:4</i> 2. a^2 <i>degree:2</i> 3. 5 <i>degree:0</i>	1. $2x^{-4}$ 2. $5\sqrt{m}$ 3. $3t^{\frac{2}{3}}$
Binomial (two terms)	1. $2n^3 - n$ <i>degree:3</i> 2. $p - 3$ <i>degree:1</i> 3. $-3a^3b^4 + a^4b^5$ <i>degree:9</i>	1. $\frac{2x+1}{x}$ 2. $\sqrt{c^3 - 2}$
Trinomial (three terms)	1. $-2x^3 + 2x - 3$ <i>degree:3</i> 2. $d(d^2 + 2d^4 - 2)$ <i>degree:5</i>	1. $x^{-3} + 2x - 5$ 2. $2^x + 3x - 5$
Polynomial (one or more terms)	1. $3x^4 + 2x^3 - 5x + 1$ <i>degree:4</i> 2. $5y^6$ <i>degree:6</i> 3. $\frac{1}{2}x^2 + \sqrt{3}x^3 - 6x^4 + 1x - 3$ <i>degree:4</i>	1. $3q^3 + \frac{p}{q}$ 2. $2^x + 3\sqrt{x}$

1. EXPAND and SIMPLIFY

a. $(7x + 3) - (2 - 2x)$

b. $(5x^3 - 3x^4 - 2x - 9x^2 - 2) + (3x^3 + 2x^2 - 5x - 7)$

c. $3(x + 5) + 8x$

d. $-2(3x + 2y) - (5x - 6y) + 2x - 7$

e. $(2x^2 + 5x) - (6x^2 - 2x)$

f. $(2x^3 + 5x - 8) + (5x^3 - 9x^2 - 11x + 5)$

g. $(2x + 3)(3x - 5)$

h. $(2x - 5)^2$

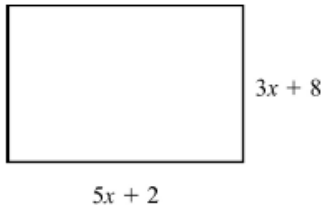
(1 Continued). EXPAND and SIMPLIFY

i. $4y^2(y^2 + 2y)$

j. $-6y^2(3y^2 - 2y - 7)$

k. $(x+3)(x+5)$

l.

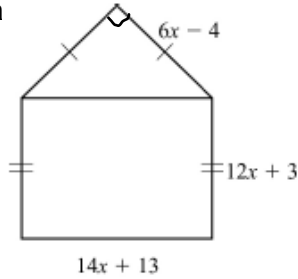


Determine an expression that represents:

Perimeter =

Area =

m.



Determine an expression that represents:

Perimeter =

Area =

2. Divide the following.

a. $\frac{32a^5 + 24a^3}{8a^3}$

b. $\frac{21x^4 + 3x^3}{3x^2}$

c. $\frac{36a^3d^5 + 72a^2d^3}{6ad^2}$

3. Factor the GCF from each expression

a. $15x^4 + 3x^5$

a.

b. $16x^2 + 24$

b.

c. $18x^4y^7 + 36x^3y^6 - 42x^5y^5$

c.

d. $3x(x-3) + 2(x-3)$

d.