

Assessments and Rubrics

“Do Now” Assessments for Each Lesson**Lesson 1**

1. Simplify the following algebraic expressions:

a) $12X + 20 - 4x + 5$

b) $-7(y - 2) + 3y$

2. Find the Greatest Common Factor

a) $20 - 36$

b) $28 - 64$

**Lesson 2**

1. Write three concepts or definitions you remember learning from the last class

**Lesson 3**

Do you remember what a binomial is? Write two examples.



Lesson 6

Please mention the topics you have had trouble understanding so far in this unit

**Lesson 8**

Match the factored form with the correct standard form:

1. $(x+3)(x+7)$

2. $(x+1)(x+11)$

3. $(x+5)(x+4)$

a) $X^2 + 9X + 20$

b) $X^2 + 12X + 11$

c) $X^2 + 10X + 21$

**Lesson 9**

Match the factored form with the correct standard form:

1. $(x-9)(x+5)$

2. $(x+2)(x-8)$

3. $(x-4)(x-3)$

a) $X^2 + 6X + 16$

b) $X^2 - 7X + 12$

c) $X^2 - 4X + 45$

Mid-Chapter Test

1. When is a polynomial considered to be in standard form? Write one example of a polynomial in standard form

2. Classify the following polynomials according to their number of terms. Then, find the degree and the leading coefficient for each.

a. $7y^3 - 15y^{15} + 3xy$

b. $2r^5 + 8r^3 - 4r^2 - 9r^7$

c. $\frac{2}{3}w^8 + \pi w^2$

3. Find the sum

a. $(3n^2 - 5n - 7) + (-5n^2 - 9n + 11)$

b. $(-7x^5 + 2x^3 + x - 1) + (2x^2 - 4x^3 + 2x - 8)$

4. Find the difference

a. $(y^3 - 4y + 6) - (3y^4 + 7y - 2)$

b. $(-r^2 + 8r - 1) - (-4r^2 - 7r + 5)$

5. Use the Foil method to find the product

a. $(x - 5)(x + 1)$

b. $\left(y - \frac{3}{4}\right)\left(y - \frac{1}{2}\right)$

6. Find the product by using a table or the Distributive Property

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

b. $(5x + 2)(3x - 1)$

7. Use the Zero Product Property to solve the following equations

a. $(4p^2 - 2p)(2p + 6)$

b. $(3q + 18)(7q - 14)$

8. Factor the polynomials

a. $5n^2 - 45n$

b. $3x^7 - 18x^4$

9. Use the special product patterns to find the product

a. $64 \bullet 16$

b. $33 \bullet 27$

10. A dolphin leaps out of the water while swimming. The height y (in feet) of this happy, porpoising dolphin can be modeled by $y = -16x^2 + 8x$, where x is the time (in seconds) since the dolphin leaped out of the water. Find the roots of the equation when $y = 0$. Explain what the root means in this situation.

Chapter Test

1. Find the sum or the difference. Then, identify the leading coefficient and the degree of the polynomial.

a. $(-x^2 + 3x + 5) - (x^2 - 6x - 3)$

b. $(7y^3 - 4y^2 + \frac{2}{5}) + (2y^3 + 6y^2 - \frac{3}{10})$

2. Define or give an example of the following vocab terms

a. Monomial _____

b. Trinomial _____

c. Standard form _____

d. Factored form _____

e. Double roots _____

3. Find the product using a different method for each (table, FOIL Method, or Distributive Property)

a. $(3y - 8) \circ (y^2 + 4y - 1)$

b. $(2x + 5) \circ (2x - 5)$

c. $(p - 2) \circ (3x^2 + x - 8)$

4. Factor the polynomial completely

a. $z^2 - 2z + 35$

b. $t^2 - 11t + 28$

5. Solve the equations

a. $3y(y - 7)(y + 5) = 0$

b. $3t^2 + 16t - 12 = 0$

6. Write a polynomial equation in factored form that has three positive roots.

7. Two years ago, you started to save money because you want to buy a piano as a graduation present for your oldest sister. You deposited 500 dollars in an account that earns interest compounded annually. The expression $500(1 + r)^2$ represents the balance after the two years, where r is the annual interest rate in decimal form.

- a. Write the polynomial in standard form that represents the balance of your account after 2 years.
- b. If the interest rate is 5%, what is the balance of your account after 2 years?
- c. The piano costs \$1350. Do you have enough money to buy it for your sister after saving money for two years?

Rubrics for Performance Tasks

❖ Mid-Chapter Performance Task

Grading Rubric	Excellent (4)	Proficient (3)	Developing (2)	Beginning (1)
<p>✚ Before the presentation research: Student stays on task and focused while gathering the information needed for the assignment</p>				
<p>✚ Content of the presentation/Video: The information is accurate, easy to understand, well organized and synthesized.</p>				
<p>✚ Visuals: Presentation includes pictures, videos, diagrams, or examples to support learning of the topic.</p>				
<p>✚ Fluency and effort to be understood by others: Presenter speaks clearly and without hesitation, while making an effort to make sure teammates are able to understand the topic.</p>				
<p>✚ Listening skills: Presenter takes time to listen to and address teammates' questions and tries their best to answer. Student is focused and engaged while other teammate is presenting.</p>				

❖ End-of-Chapter Performance Task

Grading Rubric	Excellent (4)	Proficient (3)	Developing (2)	Beginning (1)
<p>✚ Before the presentation research: Student stays on task and focused while gathering the information needed for the assignment</p>				
<p>✚ Content of the presentation/Video: The information is accurate, easy to understand, well organized and synthesized.</p>				
<p>✚ Visuals: Presentation includes pictures, videos, diagrams, or examples to support learning of the topic.</p>				
<p>✚ Fluency and effort to be understood by others: Presenter speaks clearly and without hesitation, while making an effort to make sure teammates are able to understand the topic.</p>				
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