



5 (AM) Advanced Mastery 100%
4 (M) Mastery 93%
3 (VM) Vital Mastery 82%
2 (FM) Foundational Mastery 70%
1 (NYM) Not Yet Mastered 45%
0 (NA) No Attempt 0%

Name: \_\_\_\_\_

Per: \_\_\_\_\_ Date: \_\_\_\_\_

**Pre-Assessment**

IM2 – 2.2 (A – Pre) Operations with Polynomials

**Standards & Skill Mastery**

Student Self-Score	Skills Assessed / Goals	Teacher Score
	A.APR.1 – I can add, subtract, and multiply polynomials.	
	SMP – I can self-reflect and clearly communicate my plan for improvement.	

**Pre-Assessment Reflection**

<p>Check all that apply. To study for this assessment, I will...</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> independently, rework the pre-assessment.</li> <li><input type="checkbox"/> complete all of my practice.</li> <li><input type="checkbox"/> watch tutorials online.</li> <li><input type="checkbox"/> study my notes until I understand them.</li> <li><input type="checkbox"/> work through practice problems &amp; recheck answers.</li> </ul>	<p>My plan to maintain or improve my mastery is... (what, when, and how?)</p> <hr/> <hr/> <hr/> <hr/> <hr/>
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**Key Terms, Formulas, & Notes**

Polynomial ≡ Poly: Many, Nomial: Term

Product ≡ the result of multiplication.

Sum ≡ the result of addition.

Difference ≡ The result of subtraction.

Combine Like Terms ≡ to add or subtract terms of the same degree.

**Directions** – Add or subtract the following polynomial expressions, and circle an equivalent expression (A.APR.1). Show work for credit.

- |  |  |
|--|--|
| <p>1. <math>(ax + 4) + (6x - b)</math></p> <ul style="list-style-type: none"> <li>a. <math>6ax - 4b</math></li> <li>b. <math>(6 + a)x - b + 4</math></li> <li>c. <math>6ax - b + 4</math></li> <li>d. <math>6ax^2 - bax + 10x - 4b</math></li> </ul> | <p>2. <math>(7y - 2) - (3y + 5)</math></p> <ul style="list-style-type: none"> <li>a. <math>-21y + 10</math></li> <li>b. <math>7(y - 2) - 3(y + 5)</math></li> <li>c. <math>y(7 - 3) - (2 + 5)</math></li> <li>d. <math>4y + 10</math></li> </ul> |
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**Directions** – Add or subtract the following polynomial expressions, and write the result in standard form (A.APR.1).

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

4.  $(4x^2 - 5x + 6) + (9x^2 - 2x) - (11x - 3)$

**Directions** – Error Analysis: Circle the first mistake made in the student’s work below. Then, correct the error (A.APR.1).

5. Given  $(3x + 4x^2) - (-5x + 3)$   
Step 1  $3x + 4x^2 + 5x + 3$   
Step 2  $8x + 4x^2 + 3$   
Step 3  $4x^2 + 8x + 3$  done!



**Directions** – Multiply the following polynomial expressions, and write the result in standard form (A.APR.1).

6.  $(\frac{1}{2}pm)(-8p^3)$

7.  $(5x - 2)(2n + 6)$

8.  $(2d - 3)(2d + 3)$

**Directions** – Error Analysis: Circle the first mistake made in the student’s work below. Then, correct the error (A.APR.1).

9. Given  $(ax + b)(cx - d)$   
Step 1  $(ax)(cx) + (ax)(-d) + (b)(cx) + (b)(-d)$   
Step 2  $(acx^2) + (-adx)(bcx) + (-bd)$   
Step 3  $acx^2 - abcdx^2 - bd$  done!

