

Objective 1: Multiplying Polynomials

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

$4x^6 - 8x^4 + 16x^3 - 6x^3 - 2x^6 + 4x^4$

2. $4x^2y^2(4x - 5x^2y^3 + 2xy) - 2xy(2y + 3y^6 - 5x^3y^3)$

$16x^3y^2 - 20x^4y^5 + 8x^3y^3 - 4xy^2 - 6xy^7 + 10x^4y^4$

Objective 2: Multiplying Polynomials

3. $(x - 7)^2$

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

Objective 3: Application

5. Find the volume of a cube with side length $x+2$.

6. There are three consecutive odd integers. The product of the larger two integers is equivalent to the sum of the first integer squared and 14. What are the integers?

$6n + 8 = 14$
 $6n = 6$
 $n = 1$ 1, 3, 5

Objective 4: Review

7. Given the line $x + 2y = 4$, write the equation of the line **PARALLEL** to the line and passes through the point $(6, -2)$.

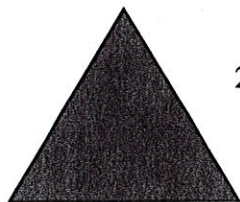
$y = -\frac{1}{2}x$
 -2 -3

8. Write a reasonable domain and range for the following scenario: Lucy hired a magician to perform card tricks at her son's birthday party. Lucy has paid the magician to stay for 2 hours. He can perform 1 card trick every 3 minutes.

Objective 5: Calculator Inactive

9. If the perimeter of the triangle is, $8x^2 + 10x + 16$, what is the polynomial that represents the missing side length?

$3x^2 + 2x - 8$



$2x^2 + 4x + 10$

10. Solve the following equation for t : $r = \frac{1}{7}t(s_1 + s_2)$

1.	$2x^6 - 4x^4 + 10x^3$
2.	$16x^3y^2 - 20x^4y^5 + 8x^3y^3 - 4xy^2 - 6xy^7 + 10x^4y^4$
3.	$x^2 - 14x + 49$
4.	$18x^3 + 18x^2 + 19x + 36$
5.	$x^3 + 6x^2 + 12x + 8$
6.	1, 3, 5
7.	$y = -\frac{1}{2}x + 1$
8.	Domain: 0 to 2 hrs or 0 to 120min Range: 0 tricks to 40 tricks
9.	$3x^2 + 4x + 14$
10.	$t = \frac{7r}{(s_1 + s_2)}$