

**STANDARD I:** The student will be able to perform basic operations on algebraic expressions.

**OBJECTIVE**

2. Add and subtract polynomials.

**ELIGIBLE CONTENT**

- Using the distributive property may be required.
- Unlike denominators may be used.

Tips:

$(x+y) \implies$  get out of parentheses jail free.

$-(x+y) \implies$  distribute the - to all terms.

"change all signs"

"LIKE" Terms  $\implies$  same variable(s) and each corresponding variable must be raised to the same exponent.

Mr. C.

**SAMPLE ITEMS**

**1** Simplify:  $15x^2 + xy - 9x^2 - 3xy$

- A  $6x^2 - 2xy$
- B  $6x^4 - 2x^2y^2$
- C  $24x^2 - 4xy$
- D  $24x^4 - 4x^2y^2$

**2** Simplify:  $2(t^2 + 5) - 3(t^2 + 5)$

- A  $t^2 + 5$
- B  $-t^2 - 5$
- C  $-t^2 + 10$
- D  $-t^2 + 25$

**3** Simplify:  $2.5x^2 - 7.5 + 0.5x^2 + 2$

- A  $3x^2 + 1$
- B  $3x^2 - 5.5$
- C  $3x^2 - 5$
- D  $6x^2 + 1$

**4** Simplify:  $\frac{2x+1}{2} + \frac{12x+3}{6}$

- A  $3x + 1$
- B  $3x + 4$
- C  $14x + 1$
- D  $14x + 4$

**5** Simplify:  $\frac{1}{3}x + \frac{1}{3}y + 4(\frac{1}{6}x + \frac{1}{4}y)$

- A  $x + \frac{2}{3}y$
- B  $x + \frac{4}{3}y$
- C  $\frac{1}{2}x + \frac{4}{3}y$
- D  $x + \frac{1}{3}y$