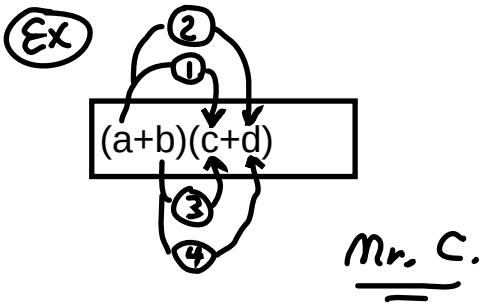
STANDARD I: The student will be able to perform basic operations on algebraic expressions.

OBJECTIVE

3. Multiply polynomials.

Tips: * Use arrows to help distribute the multiplication.
* KNOW THE 6 EXPONENT RULES
(see Bulldogmath.com for extra copy of rules)



ELIGIBLE CONTENT

- Multiplying two quantities in parentheses may be required.
- Squaring a quantity in parentheses may be required.
- Adding or subtracting may be required.
- Raising a quantity to a power may be required.
- Fractions may be used.
- Adding exponents may be required.

SAMPLE ITEMS

1 Simplify: $\frac{3y}{2} \bullet \frac{2y}{3}$

A $\frac{4}{9}$

B $\frac{9}{4}$

C y

D y^2

2 Simplify: $(4x)(2y) - (3x)(-y)$

A $5xy$

B $11xy$

C $24x^2y^2$

D $x - y$

3 Simplify: $(4x + 3)(3x - 2)$

A $12x^2 + x + 6$

B $12x^2 - 6$

C $12x^2 - 6x - 6$

D $12x^2 + x - 6$

4 Simplify: $(x - 4)(x + 4)$

A x^2

B $x^2 + 8x + 16$

C $x^2 - 8x - 16$

D $x^2 - 16$

5 Simplify: $\left[\frac{4x+3}{5}\right]^2$

A $\frac{16x^2+9}{25}$

B $\frac{16x^2+24x+9}{25}$

C $\frac{4x^2+3}{5}$

D $\frac{4x^2+7x+3}{5}$

6 Simplify: $(x-6)(x-9)$

A $x^2-15x+54$

B $x^2+15x-54$

C $x^2+15x+54$

D $x^2-15x-54$

7 Simplify: $3x^2(3x)^2$

A $9x^2$

B $18x^4$

C $27x^2$

D $27x^4$

8 Which of these is equivalent to $(x^2y)^3$?

A x^2y^3

B x^5y^3

C x^5y^4

D x^6y^3