

## What's Going On?

**Checking In**

**Minds on**

It's Elementary?

**Action!**

The Distributive Property

**Consolidation**

Exit Card

**Learning Goal - I will be able to apply the distributive property.**

## Taking up Some Homework Questions

8.e)  $a^2b^2 \times a^3b^1$

$$= a^5b^3$$

Product Rule

8.h) ~~h~~  $h^2k^3 \div hk$

$$= hk^2$$

Quotient Rule

8.i)  $(-a^3b)^2$

$$= a^6b^2$$

Power of a Power Rule

## Taking up Some Homework Questions

$$9. e \quad \frac{3f^4g^3 \times 8fg^4}{(6f^2g^3)^2}$$

$$= \frac{3f^4g^3 \times 8fg^4}{36f^4g^6}$$

$$= \frac{24f^5g^7}{36f^4g^6}$$

$$36f^4g^6$$

$$= \frac{2f^1g^1}{3} \times \frac{2}{3}fg$$

Taking up Some Homework Questions

10.

$$\frac{5xy^2 \times 2x^2y}{(2xy)^2} \text{ when } x = 3 \text{ and } y = -1$$

**Without simplifying first.**

$$\frac{5(3)(-1)^2 \times 2(3)^2(-1)}{(2(3)(-1))^2}$$

$$\frac{5(3)(1) \times 2(9)(-1)}{(-6)^2}$$

$$\frac{15 \times (-18)}{36}$$

$$\frac{-270}{36}$$

$$\frac{-15}{2}$$

## Taking up Some Homework Questions

10.

$$\frac{5xy^2 \times 2x^2y}{(2xy)^2} \text{ when } x = 3 \text{ and } y = -1$$

**With simplifying first.**

$$= \frac{5xy^2 \times 2x^2y}{4x^2y^2}$$

$$= \frac{10x^3y^3}{4x^2y^2}$$

$$= \frac{10x^3y^3}{4x^2y^2}$$

$$= \frac{5}{2}xy$$

$$= \frac{5(3)(-1)}{2}$$

$$= \frac{-15}{2}$$

$$= -\frac{15}{2}$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$2(4x + 3)$$

$$= (4x + 3) + (4x + 3)$$

$$= 8x + 6$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$3(2x + 2)$$

$$= 6x + 6$$

$$\begin{array}{r} (2x + 2) \\ + (2x + 2) \\ + (2x + 2) \\ \hline \end{array}$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$2(3x - 1)$$

$$= 6x - 2 \quad + \begin{array}{r} (3x - 1) \\ (3x - 1) \\ \hline 6x - 2 \end{array}$$



**Minds on**

## It's Elementary?

What do you think the answer will be?

$$2(-4x + 1)$$
$$= -8x + 2$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$3(-x - 1)$$
$$= -3x - 3$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$\begin{aligned} & -2(1 - 2x) \\ = & -2 + 4x \end{aligned}$$

**Minds on**

## It's Elementary?

What do you think the answer will be?

$$\begin{aligned} & x(x - 3) \\ &= x^2 - 3x \end{aligned}$$

**Minds on**

What's the Pattern?

$$2(4x + 3) = 8x + 6$$

$$3(2x + 2) = 6x + 6$$

$$2(3x - 1) = 6x - 2$$

$$2(-4x + 1) = -8x + 3$$

$$3(-x - 1) = -3x - 3$$

$$-2(1 - 2x) = -2 + 4x$$

$$x(x - 3) = x^2 - 3x$$

$$-2x(x + 6) = \underline{-2x^2 - 12x}$$

**Action!**

## The Distributive Property

When distributing, multiply the monomial by each term in the polynomial.

$$a(x + y) = ax + ay$$

$$-2a^2(6a^3b - 3ab)$$

$$= -2a^2(6a^3b - 3ab)$$

$$= -12a^5b + 6a^3b$$

**Action!**

## The Distributive Property

When distributing, multiply the ~~monomial~~ by each term in the ~~polynomial~~.

(brackets)

(term out front)



## Action!

# The Distributive Property

When distributing, multiply the monomial by each term in the polynomial.

## Simplify

Jennifer and Paige's Method

$$\begin{aligned}
 & 2(4x - 3) - 3(2x - 5) \\
 &= (8x - 6) - (6x - 15) \\
 &= 8x - 6 - 6x + 15 \\
 &= 2x + 9
 \end{aligned}$$

Mr. Gilbert's Method

$$\begin{aligned}
 & 2(4x - 3) - 3(2x - 5) \\
 &= 8x - 6 - 6x + 15 \\
 &= 2x + 9
 \end{aligned}$$

**Consolidation**

# Exit Card

**Simplify**

$$3(-2x + 1) - 2(x - 7)$$

**This will be tomorrow's LGL**

**Consolidation**

# Homework!!!