

Assignment 1-2
Properties of Real Numbers

Chapter 1-2 (Properties of Real Numbers)

Name the sets of numbers to which each value belongs

(20) $-\sqrt{9}$

$= -3$

$\mathbb{R}, \text{rat.}, \mathbb{Z}$

(21) $1.\bar{6}$

\mathbb{R}, rat

(22) $-\sqrt{18}$

\mathbb{R}, irr

\mathbb{R} : Real Numbers

rat: Rational #s

irr: Irrational #s

\mathbb{Z} : Integers #s

W: Whole #s

N: Natural #s

Simplify each expression

(23) $2m + 7n - 6m - 5n$

$2m - 6m + 7n - 5n$

$-4m + 2n$

(24) $-5(a - 4b) + 4b$

$-5a + 20b + 4b$

$-5a + 24b$

(25) $2(5x + 4y) - 3(x + 8y)$

$10x + 8y - 3x - 24y$

$10x - 3x + 8y - 24y$

$7x - 16y$

* Students should recognize "LIKE TERMS"

≠ Manipulate them

(Assoc. & Comm. Properties)

i.e. move them next to one another

* Distributive Property

Assignment 1-2
Properties of Real Numbers

Chapter 1-2 continued

$$\textcircled{26} \quad 12.50(2+3+1)$$
$$= 2(12.50) + 3(12.50) + 1(12.50)$$

$$\textcircled{27} \quad 2(12.50) + 3(12.50) + 1(12.50)$$
$$= 25 + 37.50 + 12.50$$
$$= 25 + 50$$
$$= \boxed{75} = \$75$$

Assignment 1.2
Properties of Real Numbers

Name the sets of numbers to which each value belongs.

$$-\sqrt{9} = -3$$

- A) Real Numbers, Irrational Numbers and Integers Numbers
 - B) Real Numbers, Rational Numbers and Integers Numbers
-

$$1.\bar{6}$$

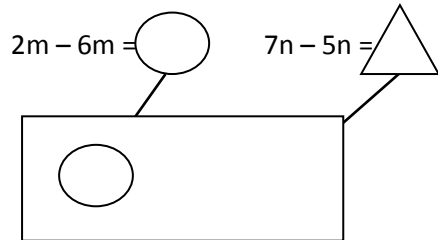
- A) Real Numbers, Rational Numbers
 - B) Whole Numbers, Natural Numbers
-

$$\sqrt{18}$$

- A) Real Numbers, Natural Numbers
 - B) Real Numbers, Irrational Numbers
-

Simplify each expression.

$$2m + 7n - 6m - 5n$$



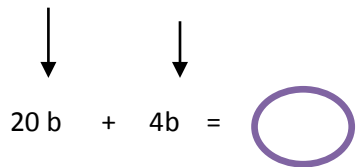
- A) $4m + 2n$
 - B) $-4m + 2n$
-

$$-5(a-4b) + 4b$$

$$-5 \times a = -5a$$

$$-5 \times -4b = 20b$$

$$-5a + 20b + 4b$$



- A) $24b$
 - B) $24b^2$
-



Choice Strategy

Assignment 1.2
Properties of Real Numbers

$$2(5x + 4y) - 3(x + 8y)$$

$$2 \bullet 5x = 10x$$

$$2 \bullet 4y = 8y$$

$$-3 \bullet x = -3x$$

$$-3 \bullet 8y = -24y$$

$$10x + -3x = \boxed{}$$

$$8y + -24y = \boxed{}$$

- A) $7x - 16y$
B) $-7x + 16y$

Assignment 1.2
Properties of Real Numbers

CLOTHING

For exercises 1 and 2 use the following information.

A department store sells shirts for \$12.50 each. Dalila buys 2, Latisha buys 3, and Pilar buys 1.

1. Illustrate the Distributive Property by writing two expressions to represent the cost of these shirts.

$$\$12.50 (2 + 3 + 1)$$

$$\$12.50 \times 2 = \boxed{25}$$

$$\$12.50 \times 3 = \boxed{37.50}$$

$$\$12.50 \times 1 = \boxed{12.50}$$

$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$

- A) \$75.00
B) \$7.50

2. Use the Distributive Property to find how much money the store received from selling these shirts.

$$2 (\$12.50) + 3 (\$12.50) + 1 (\$12.50)$$

$$2 \times \$12.50 = \boxed{}$$

$$3 \times \$12.50 = \boxed{}$$

$$1 \times \$12.50 = \boxed{}$$



$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$



- A) \$75.00
B) \$7.50







Assignment 1.2
Properties of Real Numbers

Name the sets of numbers to which each value belongs.

$-\sqrt{9} = -3$  _____,  _____,  _____

$1.\bar{6}$  _____,  _____

$\sqrt{18}$  _____,  _____

- Choices:**
-  Real Numbers
 -  Rational Numbers
 -  Irrational Numbers
 -  Integers Numbers
 -  Whole Numbers
 -  Natural Numbers

Simplify each expression.

$2m + 7n - 6m - 5n$


$2m - 6m = \bigcirc$ $7n - 5n = \triangle$



$-5(a-4b) + 4b$

$-5 \times a = -5a$

$-5 \times -4b = 20b$

$-5a + 20b + 4b$
 ↓ ↓
 20b + 4b = 



Assignment 1.2
Properties of Real Numbers

$$2(5x + 4y) - 3(x + 8y)$$

$$2 \bullet 5x = 10x$$

$$2 \bullet 4y = 8y$$

$$-3 \bullet x = -3x$$

$$-3 \bullet 8y = -24y$$

$$10x + -3x = \boxed{}$$

$$8y + -24y = \boxed{}$$

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$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$

2. Use the Distributive Property to find how much money the store received from selling these shirts.

$$2 (\$12.50) + 3 (\$12.50) + 1 (\$12.50)$$

$$2 \times \$12.50 = \boxed{}$$

$$3 \times \$12.50 = \boxed{}$$

$$1 \times \$12.50 = \boxed{}$$

$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$

Assignment 1.2
Properties of Real Numbers

Name the sets of numbers to which each value belongs.

$-\sqrt{9} = -3$ _____, _____, _____

$1.\bar{6}$ _____, _____




$\sqrt{18}$ _____, _____




Choices:


- Real Numbers
- Rational Numbers
- Irrational Numbers
- Integers Numbers
- Whole Numbers
- Natural Numbers



Simplify each expression.




$2m + 7n - 6m - 5n$






 -  = 

 -  = 

$-5(a-4b) +$ 

 x  = 

 x  = 

 +  + 
 

 +  = 

Closed Strategy

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$$2(5x + 4y) - 3(x + 8y)$$

$$\text{pink} \times \text{green} = \text{black circle}$$

$$\text{pink} \times \text{gray} = \text{orange circle}$$

$$\text{red} \times \text{yellow} = \text{light blue circle}$$

$$\text{red} \times \text{cyan} = \text{purple circle}$$

$$\text{black circle} + \text{light blue circle} = \text{black rounded rectangle}$$

$$\text{orange circle} + \text{purple circle} = \text{light blue rounded rectangle}$$

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CLOTHING

For exercises 1 and 2 use the following information.

A department store sells shirts for \$12.50 each. Dalila buys 2, Latisha buys 3, and Pilar buys 1.

1. Illustrate the Distributive Property by writing two expressions to represent the cost of these shirts.

$$\underline{\hspace{2cm}} (\text{yellow} + \text{gray} + \text{pink})$$

$$\underline{\hspace{2cm}} \times \text{yellow} = \boxed{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} \times \text{gray} = \boxed{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} \times \text{pink} = \boxed{\hspace{2cm}}$$

$$\boxed{\hspace{2cm}} + \boxed{\hspace{2cm}} + \boxed{\hspace{2cm}} = \boxed{\hspace{4cm}}$$

2. Use the Distributive Property to find how much money the store received from selling these shirts.

$$\text{yellow} (\underline{\hspace{2cm}}) + \text{gray} (\underline{\hspace{2cm}}) + \text{pink} (\underline{\hspace{2cm}})$$

$$\text{yellow} \times \underline{\hspace{2cm}} = \boxed{\hspace{2cm}}$$

$$\text{gray} \times \underline{\hspace{2cm}} = \boxed{\hspace{2cm}}$$

$$\text{pink} \times \underline{\hspace{2cm}} = \boxed{\hspace{2cm}}$$

$$\boxed{\hspace{2cm}} + \boxed{\hspace{2cm}} + \boxed{\hspace{2cm}} = \boxed{\hspace{4cm}}$$

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Name the sets of numbers to which each value belongs.

$$-\sqrt{9}$$

1. $\bar{6}$

$$\sqrt{18}$$

Simplify each expression.

$$2m + 7n - 6m - 5n$$

$$-5(a-4b) + 4b$$

$$2(5x + 4y) - 3(x + 8y)$$

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Name the sets of numbers to which each value belongs.

$-\sqrt{9}$ _____

$1.\overline{6}$ _____

$\sqrt{18}$ _____

Simplify each expression.

$2m + 7n - 6m - 5n$

$-5(a-4b) + 4b$

$2(5x + 4y) - 3(x + 8y)$

CLOTHING

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