Do Now: Simplify the expression.

1.) $8.1(x - 4) - 5.28$ $= 8.1x - 37.68$

2.) $-3(a + 2)$ $= -3a - 6$

3.) $4(7 + b) + 9b - 13 = 15 + 13b$

4.) $-0.25(8 - k) = -2 + 0.25k$

29, 31, 28

(29)

$$108 = \cancel{76} + 4c$$

$$-76 \quad \cancel{-76}$$

$$\frac{32}{4} = \frac{4c}{4}$$

$76 + 4c = 108$

(\$8 for the coupon)

$$8 = c$$

31

-9 ft/min   360 ft

Total = Part + Part

(a) $360 = 234 + 9m$

$360 - 9m = 234$
$-360 \quad\quad -360$

$-9m = -126$
$\overline{-9} \quad \overline{-9}$

$m = 14$

360
-234
$\overline{126}$

(14 minutes)

(b) $360 - 9m = 180$
$-360 \quad\quad -360$

$-9m = -180$
$\overline{-9} \quad \overline{-9}$

(20 minutes)

$m = 20$

28

$$100 = 45 + 11c$$

$$45 + 11c = 100$$
$$-45 \qquad\qquad -45$$

$$\frac{11c}{11} = \frac{55}{11}$$

$$c = 5$$

5 CD's

3.2 Solving Equations Having Like Terms and Parentheses

7.NS.1
7.NS.2
7.EE

- SWBAT solve equations using the distributive property.
- SWBAT understand operations and how they are related.

- Calculators: No

A bookstore spent $241 to send a group of students to a reading competition. Each student who won was given a $5 gift certificate and a personalized bookmark that cost $2. Included in the $241 was $45 for the salary of a staff member who accompanied the students to the competition. How many students won prizes?

$$241 = 7s + 45 \quad \text{or} \quad 241 = s(5+2) + 45$$

$$-45 \qquad\qquad -45$$

$$\frac{196}{7} = \frac{7s}{7}$$

$$28 = s$$

28 students won prizes

Solve the equation:

a.) $-21 = 7(3 - x)$

$$-21 = \cancel{21} - 7x$$

$$-21 \quad -21$$

$$\frac{-42}{-7} = \frac{-7x}{-7}$$

$$\boxed{6 = x}$$

b.) $35 - 3(8 - 4x) = 12$

$35 - 24 + 12x = 12$

$11 + 12x = 12$
$ -11$

$\dfrac{12x}{12} = \dfrac{1}{12}$

$x = \dfrac{1}{12}$

c.) $1.9 + 5.14x - 2(x - 1) = 8$

$$1.9 + 5.14x - 2x + 2 = 8$$

$$190 + 514x - 200x + 200 = 800$$

$$\cancel{390} + 314x = 800$$

$$-390 \qquad\qquad -390$$

$$\frac{\cancel{1}\,\cancel{3}14x}{314} = \frac{410}{314}$$

$$x = \frac{410}{314} = \boxed{\frac{205}{157}}$$

Reduce

Solve the equation:

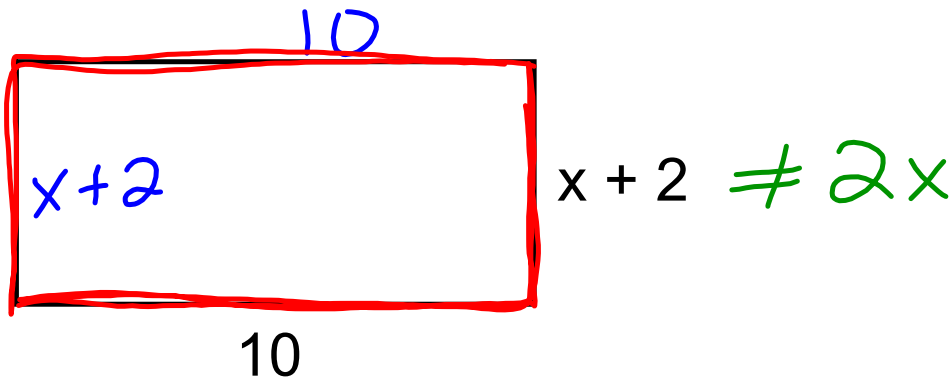a.) $26 = 2(x - 6) - 13.1$

b.) $-2(17 - 3k) + 17 = -22$

c.) $0.4k - 3(8k - 60) = -20$

Find the value of x for the given shape.

Perimeter = 28 units

10

$x+2$

$x + 2 \neq 2x$

10

$$28 = 10 + 10 + x + 2 + x + 2$$

$$28 = 24 + 2x$$

$-24 \quad -24$

$$\frac{4}{2} = \frac{2x}{2}$$

$$2 = x$$

Your cell phone provider charges a monthly fee of $19.75 for 200 minutes. You are also charged $0.25 per minute for each minute over 200 minutes. Last month, your bill was $29.50.

Write and solve an equation to find the total number of minutes you used last month.

Exit Pass 3.2

Describe and correct the error.

$$-2(5 - n) = 2$$

$$-10 - 2n = 2$$

$$-2n = 12$$

$$n = -6$$

"Don't blame the sea if you cannot catch a fish."

Working individually or with a partner, complete the workbook.

Workbook pg. 33

Reflection of Today's Lesson

3.2 Solving Equations Having Like Terms and Parentheses

7.NS.1
7.NS.2
7.EE

- SWBAT solve equations using the distributive property.
- SWBAT understand operations and how they are related.

- Calculators: No

Homework

Workbook pg. 33 #1-15 odds, #17-19 all

pg. 127-128 #12-36 evens only