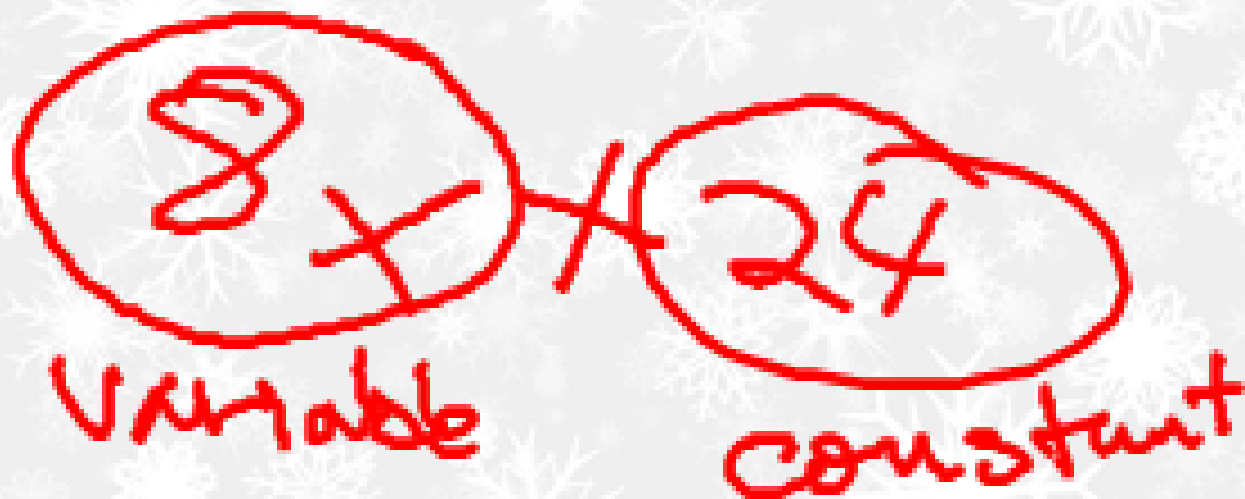


Warm Up:

Use the distributive property to simplify the expression:

$$8(x + 3)$$



The steps of a two step equation:

Our goal is to... !

Always perform opposite operations to **BOTH SIDES.**

Step 1: Add or Subtract on **BOTH** sides

Step 2: Multiply or Divide on **BOTH** sides

Step 3: Check your answer!

(Okay, so maybe it's kind of like a three step equation).



The image features three intricate, glowing blue fractal-like structures against a dark blue background. These structures are composed of many small, interconnected branches, creating a complex, tree-like or snowflake-like appearance. The central structure is the largest and most prominent, while the two smaller ones are positioned in the upper left and upper right corners. The overall aesthetic is ethereal and scientific.

<http://youtu.be/J2TYyUftI8k>

$$6(6) + 8 = 44$$

Let's Try!

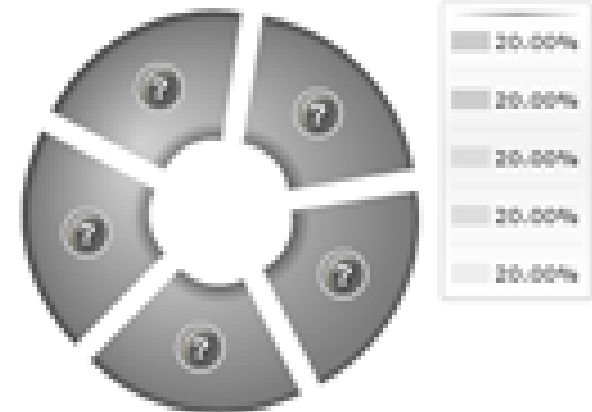
$$36 + 8 = 44 \checkmark$$

1) Solve for x:

$$\begin{array}{r} \textcircled{6x} + 8 = 44 \\ -8 \quad -8 \\ \hline 6x = 36 \\ \hline 6 \quad 6 \\ x = 6 \end{array}$$

$$6x + 8 = 44$$

- A $x = 9$
- B $x = 12$
- C $x = 7$
- D $x = 10$
- E $x = 6$



last

$$14(3) - 14 = 28$$

$$42 - 14 = 28 \checkmark$$

$$2) \quad \textcircled{14y} - 14 = 28$$

$$\quad \quad \quad +14 \quad +14$$

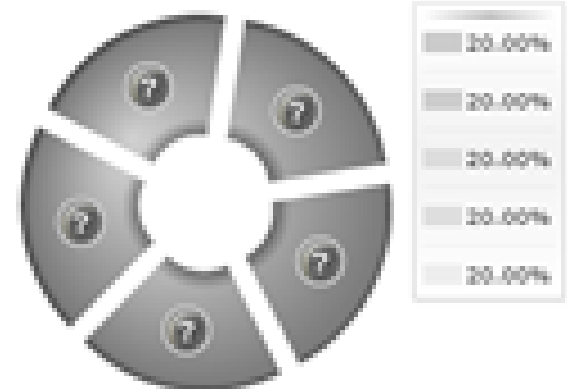
$$14y = 42$$

$$\quad \quad \quad 14$$

$$y = 3$$

$$14y - 14 = 28$$

- A** $y = 2$
- B** $y = 14$
- C** $y = 3$
- D** $y = 1$



$$\frac{63}{7} + 3 = 12$$
$$9 + 3 = 12$$

3) $\frac{m}{7} + 3 = 12$

~~-3~~

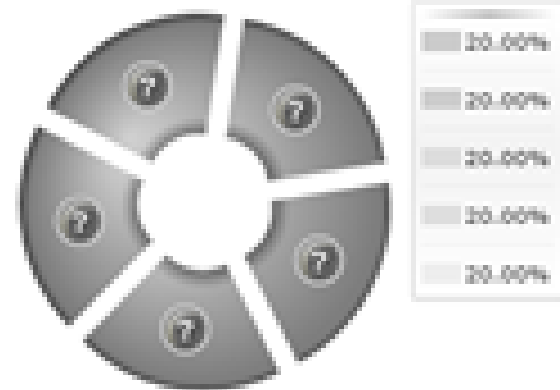
~~-3~~

~~$\frac{m}{7} = 9 \cdot \frac{7}{7}$~~

$$m = 63$$

$$\frac{m}{7} + 3 = 12$$

- A** $m = 63$
- B** $m = 105$
- C** $m = 21$
- D** $m = 16$
- E** $m = -63$



$$-\frac{112}{8} - 6 = 8$$

$$14 - 6 = 8 \checkmark$$

4)

$$\frac{v}{-8} - 6 = 8$$

~~$$-\frac{112}{8} = 14 - 8$$

$$14 = -8$$~~

~~6~~ 5). $\frac{(a - 7)}{6} = 2$

$$\begin{array}{r} a - 7 = 12 \\ + 7 \quad + 7 \\ \hline a = 19 \end{array}$$



~~$(a - 7) = 2 \cdot 6$~~

A $a = 3$

B $a = 5$

C $a = -19$

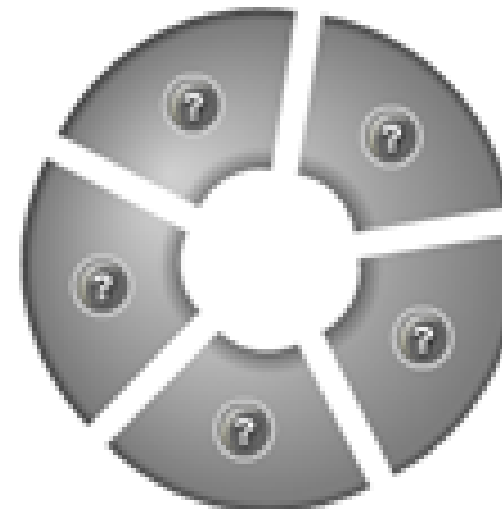
D $a = 19$

E $a = 10$

$a - 7 = 12$

$+7 \quad +7$

 $a = 19$



6) Two years of local Internet service costs \$685, including the installation fee of \$85. What is the *monthly* fee?

Define your variable:

Let x = monthly fee

Write an equation:

~~$24x + 85 = 685$~~

Solve:

1 ~~not~~

~~-85~~

$$24x = 600$$

$$\frac{24x}{24} = \frac{600}{24}$$

$$x = \$25$$

An aerial photograph of a desert landscape. The ground is a mix of light and dark brown tones, with numerous white rock art markings scattered across it. These markings include spirals, zig-zags, and other geometric patterns. A large, prominent rock shelter or cave entrance is visible on the right side of the image, with a large rock overhang. The text "ASGN #41:" and "pg. 473-476" is overlaid in the center of the image in a bold, blue font.

ASGN #41:
pg. 473-476