Get out your homework and have it ready to check. Start checking your answers with the key below. Target Check on Monday!

Classwork - Two Step Equations w/ Simplifying

Solve each equation using inverse operations. Check your solution and SHOW WORK.

$$1.3g + 5 = 17$$

$$-5 - 5$$

$$35 = 12$$

$$9 = 4$$

$$\begin{array}{c}
 2.9 &= 4a + 13 \\
 -13 & -13 \\
 \hline
 -4 &= 4q \\
 \hline
 -1 &= q
 \end{array}$$

$$3.13 = 5m - 2$$

$$+2$$

$$15 = 5m$$

$$5$$

$$5$$

$$3 = m$$

$$4.-15 = 2t - 11 +11 +11 -4 = 26 -2 = 6 -2 = 6$$

$$5.7k - 5 = -19$$

$$+5 + 5$$

$$7k - -14$$

$$7 + 7 + 7$$

$$7.10 = \frac{z}{2} + 7$$

$$-7 - 7$$

$$2.3 = \frac{z}{2}.2$$

$$6 = 7$$

$$7.10 = \frac{z}{2} + 7$$

$$-7 - 7$$

$$2.3 = \frac{z}{2}.2$$

$$6 = 7$$

$$\begin{array}{r}
 10.15 - 2b = -9 \\
 -15 & -15 \\
 \hline
 -26 = -24 \\
 \hline
 -2 & -2 \\
 \hline
 6 = (2)
 \end{array}$$

$$8. \frac{\frac{n}{5} + 6}{-6} = -4$$

$$5 \cdot \frac{1}{5} = -10.5$$

$$n = -50$$

$$3 \cdot \frac{-1}{3}y - 6 = -11$$

$$+6 + 6$$

$$-\frac{1}{3}y - 6 = -11$$

$$+6 + 6$$

$$-\frac{1}{3}y = -5 \cdot 3$$

$$-\frac{1}{3}z = -5 \cdot 3$$

$$-\frac{1}{3}z = -\frac{1}{5}$$

$$-\frac{1}{3}z = -\frac{1}{5}$$

$$-\frac{1}{3}z = -\frac{1}{5}$$

$$9.4 - 3y = 31$$

$$-4$$

$$-3y = 27$$

$$-3 = -3$$

$$y = -9$$

$$\begin{array}{c}
 15.4 \cdot \frac{x-3}{4} = 10.4 \\
 K-3 = 40 \\
 +3 +3 \\
 \hline
 K = 43
 \end{array}$$

$$\begin{array}{c}
 K = 43 \\
 \hline
 K = 43
 \end{array}$$

$$\begin{array}{c}
 +34 +34 \\
 +34 +34 \\
 +4 +34 +43
 \end{array}$$

$$\begin{array}{c}
 +34 +34 \\
 +34 +34 +43
 \end{array}$$

16. GAMES A card game has 50 cards. After dealing 7 cards to each player, Tupi has 15 cards left over. Solve the equation 50 - 7p = 15 to find the number of players.

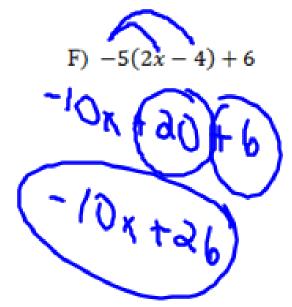
17. SHOPPING Mrs. Williams shops at a store that has an annual membership fee of \$30. Today she paid her annual membership and bought several fruit baskets costing \$15 each as gifts for her coworkers. Her total was \$105. Write and solve an equation to find the number of fruit baskets Mrs. Williams purchased.

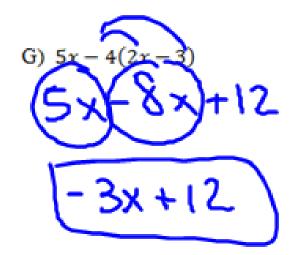
- A) Identify the terms you are working with (The + or signs in front of term are part of the term)
- B) Multiply the term outside the parenthesis with the first term inside the parenthesis.
- C) Multiply the term ouside the parenthesis with the next term inside the parenthesis.
 -Do this until you have distributed the multiplication with every term inside the parenthesis.
- D) Write the expanded form of the expression
- E) Make sure to distribute before combining like terms or solving the equation
- 1) Simplify each of the factored expressions below by using the distribuive property.

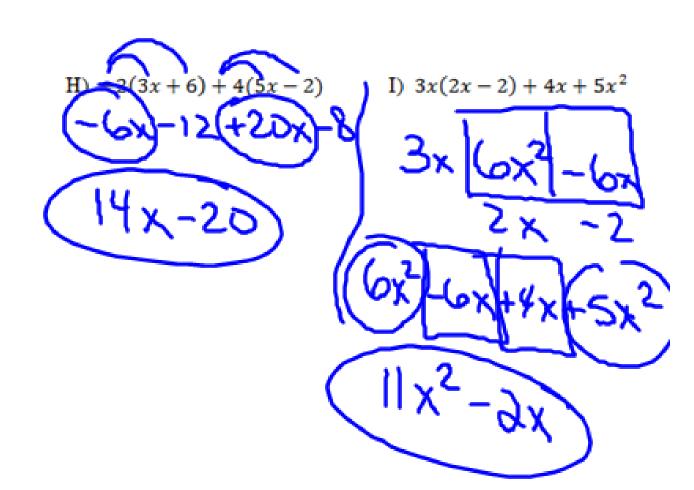
B)
$$-4(3x-2)$$

D)
$$\frac{4}{5}(10x + 20)$$

E)
$$\frac{2}{3}(6x - 9)$$







2) When you expressions in an equation where you need to use the distributive property, make sure you distribute the multiplication BEFORE combining like terms or solving the equation. After you distribute, see if you can combine like terms before you solve.

A)
$$2(x+1) = 26$$

$$2 \times 1 + 2$$

$$2 \times 1 + 2 = 26$$

$$-2 \times 2 = 26$$

$$-2 \times 3 = 24$$

$$x = 10$$

B)
$$-3(x+4) = 15$$

 $-3x - 12 = 15$
 $+12 + 12$
 $-3x = 27$
 $-3 = -3$
 $-3 = -9$

C)
$$4(2x+1) = 44$$

 $8x+4=44$
 $-4-4$
 $8x=40$
 $8x=40$
 $8x=40$

D)
$$-3(-2x+1) = 21$$

$$6x-3=21$$
 $6x=3$
 $6x=24$
 $6x=4$

D)
$$\frac{1}{3}(6x+9) = 27$$

E)
$$\frac{3}{4}(-12x+8) = 32$$

G)
$$-3(x+4)+1=19$$

 $-3x(-12)+1)=19$
 $-3x-11=19$
 $+1(-11)$
 $-3x=30$
 $-3=3$
 $-3=3$

H)
$$4(-2x+5)+4x=-12$$
 $-8x)+20(-4x)=12$
 $-4x+20=-12$
 $-20=-20$
 $-4x=-32$
 $-4x=-32$