

12-11-17

Aim: SWBAT solve and check "CLT" equations and "Variables On Both Sides" equations.

Do Now: Correct hw, then Quiz

HW: Test next Tuesday ???

Pg. 131 # 3-17

$$\begin{array}{r} \textcircled{3} \quad 2x+1=7 \\ -1 \quad -1 \\ \hline 2x = 6 \\ \frac{2x}{2} = \frac{6}{2} \\ x = 3 \end{array}$$

ck/

$$\begin{array}{l} 2x+1=7 \\ 2 \cdot 3+1 \stackrel{?}{=} 7 \\ 6+1 \stackrel{?}{=} 7 \\ 7=7 \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 3y-4=2 \\ +4 \quad +4 \\ \hline 3y = 6 \\ \frac{3y}{3} = \frac{6}{3} \\ y = 2 \end{array}$$

ck/

$$\begin{array}{l} 3y-4=2 \\ 3 \cdot 2-4 \stackrel{?}{=} 2 \\ 6-4 \stackrel{?}{=} 2 \\ 2=2 \end{array}$$

$$\begin{array}{r} \textcircled{5} \quad 10-7z=3 \\ -10 \quad -10 \\ \hline -7z = -7 \\ \frac{-7z}{-7} = \frac{-7}{-7} \\ z = 1 \end{array}$$

ck/

$$\begin{array}{l} 10-7z=3 \\ 10-7 \cdot 1 \stackrel{?}{=} 3 \\ 10-7 \stackrel{?}{=} 3 \\ 3=3 \end{array}$$

$$\begin{array}{r} \textcircled{6} \quad 15 = -4p+7 \\ -7 \quad -7 \\ \hline 8 = -4p \\ \frac{8}{-4} = \frac{-4p}{-4} \\ -2 = p \end{array}$$

ck/

$$\begin{array}{l} 15 = -4p+7 \\ 15 \stackrel{?}{=} -4(-2)+7 \\ 15 \stackrel{?}{=} 8+7 \\ 15 = 15 \end{array}$$

$$\begin{array}{r} \textcircled{7} \quad 9-2k=25 \\ -9 \quad -9 \\ \hline -2k = 16 \\ \frac{-2k}{-2} = \frac{16}{-2} \\ k = -8 \end{array}$$

ck/

$$\begin{array}{l} 9-2k=25 \\ 9-2(-8) \stackrel{?}{=} 25 \\ 9-(-16) \stackrel{?}{=} 25 \\ 25=25 \end{array}$$

$$\begin{array}{r} \textcircled{8} \quad 11 = \frac{h}{6} + 8 \\ -8 \quad -8 \\ \hline 3 = \frac{h}{6} \\ \frac{6 \cdot 3}{1} = \frac{h \cdot 6}{6 \cdot 1} \\ 18 = h \end{array}$$

ck/

$$\begin{array}{l} 11 = \frac{h}{6} + 8 \\ 11 \stackrel{?}{=} \frac{18}{6} + 8 \\ 11 \stackrel{?}{=} 3 + 8 \\ 11 = 11 \end{array}$$

$$\begin{array}{r} \textcircled{9} \quad \frac{x}{9} - 4 = 5 \\ +4 \quad +4 \\ \hline \frac{x}{9} = 9 \\ \frac{9 \cdot \frac{x}{9}}{1} = \frac{9 \cdot 9}{1} \\ x = 81 \end{array}$$

ck/

$$\begin{array}{l} \frac{x}{9} - 4 = 5 \\ \frac{81}{9} - 4 \stackrel{?}{=} 5 \\ 9 - 4 \stackrel{?}{=} 5 \\ 5 = 5 \end{array}$$

$$\begin{array}{r} \textcircled{10} \quad 6+2c=15 \\ -6 \quad -6 \\ \hline 2c = 9 \\ \frac{2c}{2} = \frac{9}{2} \\ c = \frac{9}{2} \end{array}$$

ck/

$$\begin{array}{l} 6+2c=15 \\ 6 + 2 \cdot \frac{9}{2} \stackrel{?}{=} 15 \\ 6 + 9 \stackrel{?}{=} 15 \\ 15 = 15 \end{array}$$



$$\begin{array}{r} \textcircled{11} \quad 29 = -5a + 4 \\ -4 \quad \quad -4 \\ \hline \frac{25}{-5} = \frac{-5a}{-5} \\ -5 = a \end{array}$$

ck/ $29 = -5a + 4$
 $29 \stackrel{?}{=} (-5)(-5) + 4$
 $29 \stackrel{?}{=} 25 + 4$
 $29 = 29$

$$\begin{array}{r} \textcircled{12} \quad 7 + 5b = -23 \\ -7 \quad \quad -7 \\ \hline \frac{5b}{5} = \frac{-30}{5} \\ b = -6 \end{array}$$

ck/ $7 + 5b = -23$
 $7 + 5(-6) \stackrel{?}{=} -23$
 $7 + (-30) \stackrel{?}{=} -23$
 $-23 = -23$

* $\textcircled{13}$

$$\begin{array}{r} 100 - 7c = 44 \\ -100 \quad \quad -100 \\ \hline -7c = -56 \\ -7 \quad \quad -7 \\ \hline c = 8 \end{array}$$

ck/ $100 - 7c = 44$
 $100 - 7 \cdot 8 \stackrel{?}{=} 44$
 $100 - 56 \stackrel{?}{=} 44$
 $44 = 44$

$$\begin{array}{r} \textcircled{14} \quad 20 - 6w = 14 \\ -20 \quad \quad -20 \\ \hline -6w = -6 \\ -6 \quad \quad -6 \\ \hline w = 1 \end{array}$$

ck/ $20 - 6w = 14$
 $20 - 6 \cdot 1 \stackrel{?}{=} 14$
 $20 - 6 \stackrel{?}{=} 14$
 $14 = 14$

$$\begin{array}{r} \textcircled{15} \quad -32 = -17 - \frac{d}{2} \\ +17 \quad \quad +17 \\ \hline -\frac{2}{1} \cdot \frac{-15}{1} = \frac{d}{-2} \cdot \frac{-2}{1} \\ 30 = d \end{array}$$

ck/ $-32 = -17 - \frac{d}{2}$
 $-32 \stackrel{?}{=} -17 - \frac{30}{2}$
 $-32 \stackrel{?}{=} -17 - 15$
 $-32 = -32$

$$\begin{array}{r} \textcircled{16} \quad \frac{c}{3} - 7 = 5.3 \\ +7 \quad \quad +7 \\ \hline \frac{3}{1} \cdot \frac{c}{3} = 12.3 \cdot \frac{3}{1} \\ c = 36.9 \end{array}$$

ck/ $\frac{c}{3} - 7 = 5.3$

$\frac{36.9}{3} - 7 \stackrel{?}{=} 5.3$

$12.3 - 7 \stackrel{?}{=} 5.3$

$5.3 = 5.3$

* $\textcircled{17}$

$$\begin{array}{r} -7 + \frac{z}{4} = 5.2 \\ +7 \quad \quad 7 \\ \hline \frac{4}{1} \cdot \frac{z}{4} = 12.2 \cdot \frac{4}{1} \\ z = 48.8 \end{array}$$

ck/ $-7 + \frac{z}{4} = 5.2$
 $-7 + \frac{48.8}{4} \stackrel{?}{=} 5.2$
 $-7 + 12.2 \stackrel{?}{=} 5.2$
 $5.2 = 5.2$

Solve and check.

$$\begin{array}{r}
 2(x - 5) = 20 \\
 \cancel{2x - 10} = 20 \\
 + 10 \quad + 10 \\
 \hline
 \cancel{2x} = \frac{30}{2} \\
 x = 15
 \end{array}$$

$$\begin{array}{r}
 -2(x - 5) = 20 \\
 \cancel{-2x + 10} = 20 \\
 - 10 \quad - 10 \\
 \hline
 \cancel{-2x} = \frac{10}{-2} \\
 x = -5
 \end{array}$$

$$\begin{array}{r}
 2(x - 5) = 20 \\
 2(15 - 5) \stackrel{?}{=} 20 \\
 \checkmark \\
 2(10) \stackrel{?}{=} 20 \\
 20 = 20
 \end{array}$$

$$\begin{array}{r}
 -2(x - 5) = 20 \\
 -2(-5 - 5) \stackrel{?}{=} 20 \\
 \checkmark \\
 -2(-10) \stackrel{?}{=} 20 \\
 20 = 20
 \end{array}$$