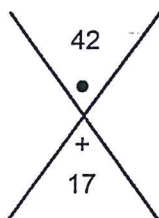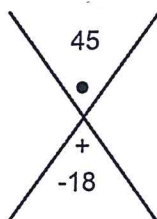# Algebra 1   Bellwork   Thursday, October 15, 2015

For problems 1 to 6 your job is to find two numbers to put on the left and right side of the X so that they multiply to the number at the top and add to the number at the bottom.
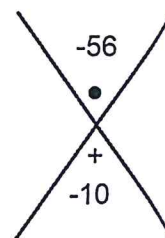
1.

$$\begin{array}{c} 42 \\ \bullet \\ + \\ 17 \end{array}$$

2.

$$\begin{array}{c} 45 \\ \bullet \\ + \\ -18 \end{array}$$

3.

$$\begin{array}{c} -56 \\ \bullet \\ + \\ -10 \end{array}$$

4.

$$\begin{array}{c} -144 \\ \bullet \\ + \\ 0 \end{array}$$

5.

$$\begin{array}{c} 64 \\ \bullet \\ + \\ -16 \end{array}$$

6.

$$\begin{array}{c} -120 \\ \bullet \\ + \\ 7 \end{array}$$

Solve each equation.

7. $2Q - 3(2Q + 6) + 8 = 18$

8. $\dfrac{4(M + 5) - M + 3}{2} - 1 = 13$

Algebra 1   Bellwork   Thursday, October 15, 2015 *Answers*

For problems 1 to 6 your job is to find two numbers to put on the left and right side of the X so that they multiply to the number at the top and add to the number at the bottom.
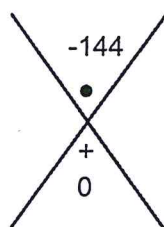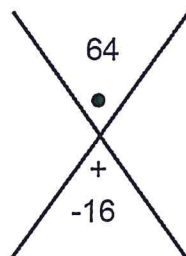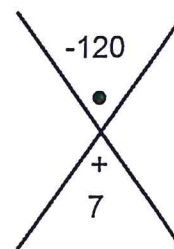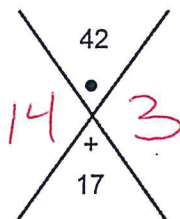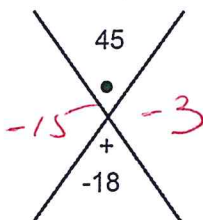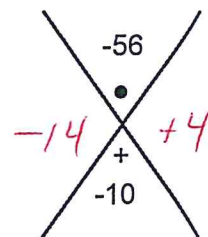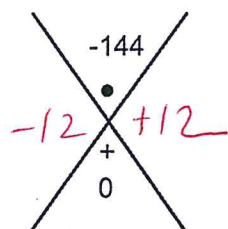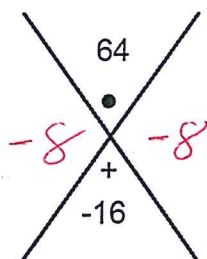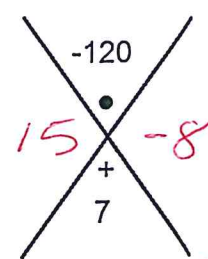
1.

$$\begin{array}{c} 42 \\ 14 \;\; \bullet \;\; 3 \\ + \\ 17 \end{array}$$

2.

$$\begin{array}{c} 45 \\ -15 \;\; \bullet \;\; -3 \\ + \\ -18 \end{array}$$

3.

$$\begin{array}{c} -56 \\ -14 \;\; \bullet \;\; +4 \\ + \\ -10 \end{array}$$

4.

$$\begin{array}{c} -144 \\ -12 \;\; \bullet \;\; +12 \\ + \\ 0 \end{array}$$

5.

$$\begin{array}{c} 64 \\ -8 \;\; \bullet \;\; -8 \\ + \\ -16 \end{array}$$

6.

$$\begin{array}{c} -120 \\ 15 \;\; \bullet \;\; -8 \\ + \\ 7 \end{array}$$

Solve each equation.

7. $2Q - 3(2Q + 6) + 8 = 18$ $\boxed{Q = -7}$

$2Q - 6Q - 18 + 8 = 18$

$-4Q - 10 = 18$

$+10 \quad +10$

$-4Q = 28$

8. $\dfrac{4(M + 5) - M + 3}{2} - 1 = 13$ $\boxed{m = 5/3}$

$\dfrac{4M + 20 - M + 3}{2} - 1 = 13$

$\dfrac{3m + 23}{2} - 1 = 13$

$\Rightarrow 2 \cdot \dfrac{3m + 23}{2} = 14 \cdot$

$3m + 23 = 28$

$ -23 \quad -23$

$\dfrac{3m}{3} = \dfrac{5}{3}$