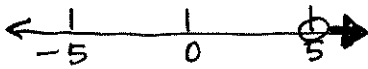
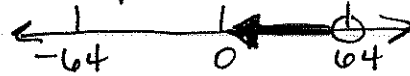


* INEQUALITIES REVIEW ANSWER KEY *

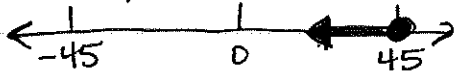
31) $t > 5$



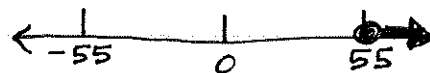
32) $p < 64$



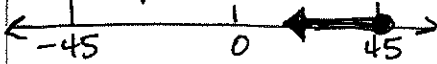
33) $p \leq 45$



34) $s \geq 55$



35) $q \leq 45$



36) $5 \leq x + 1$

$$\begin{array}{r} -1 \quad -1 \\ \hline 4 \leq x \\ \boxed{x \geq 4} \end{array}$$

37) $\frac{a}{3} > 4 \cdot 3$

$$\boxed{a > 12}$$

38) $y - 6 < 9$

$$\begin{array}{r} +6 \quad +6 \\ \hline \boxed{y < 15} \end{array}$$

39) $-2n \leq 10$

$$\begin{array}{r} -2 \quad -2 \\ \hline \boxed{n \geq -5} \end{array}$$

FLIP!

40) $\frac{3b}{3} \geq \frac{3}{3}$

$$\boxed{b \geq 1}$$

41) $\frac{p}{-2} < -5 \cdot -\frac{2}{1}$

$$\boxed{p > 10}$$

42) $r + 8 > 12$

$$\begin{array}{r} -8 \quad -8 \\ \hline \boxed{r > 4} \end{array}$$

$$\begin{array}{r} \textcircled{43} \quad j - 7 \leq 24 \\ \quad +7 \quad +7 \\ \hline \boxed{j \leq 31} \end{array}$$

$$\begin{array}{r} \textcircled{44} \quad h - 5 \geq -16 \\ \quad +5 \quad +5 \\ \hline \boxed{h \geq -11} \end{array}$$

$$\begin{array}{r} \textcircled{45} \quad 8 + b < -3 \\ \quad -8 \quad -8 \\ \hline \boxed{b < -11} \end{array}$$

$$\begin{array}{r} \textcircled{46} \quad 3k \leq -27 \\ \quad 3 \quad 3 \\ \hline \boxed{k \leq -9} \end{array}$$

$$\begin{array}{r} \textcircled{47} \quad \cancel{4} \cdot \frac{h}{\cancel{4}} > 16 \cdot \frac{4}{\cancel{4}} \\ \hline \boxed{h > 64} \end{array}$$

$$\begin{array}{r} \textcircled{48} \quad 6 \cdot 9 < \frac{a}{\cancel{6}} \cdot \frac{\cancel{6}}{1} \\ \hline 54 < a \\ \boxed{a > 54} \end{array}$$

$$\begin{array}{r} \textcircled{49} \quad \frac{-7z}{-7} < \frac{21}{-7} \leftarrow \text{FLIP!} \\ \hline \boxed{z > -3} \end{array}$$

On back...

$$\begin{array}{r} \textcircled{23} \quad 7m - 8 > 6 \\ \quad +8 \quad +8 \\ \hline 7m > 14 \\ \quad 7 \quad 7 \\ \hline \boxed{m > 2} \end{array}$$

$$\begin{array}{r} \textcircled{24} \quad 2x - 6 \geq -9 \\ \quad +6 \quad +6 \\ \hline 2x \geq -3 \\ \quad 2 \quad 2 \\ \hline \boxed{x \geq -\frac{1}{2}} \end{array}$$

$$\begin{array}{r} \textcircled{25} \quad -9a - 1 \leq 26 \\ \quad +1 \quad +1 \\ \hline -9a \leq 27 \\ \quad -9 \quad -9 \leftarrow \text{FLIP!} \\ \hline \boxed{a \geq -3} \end{array}$$

$$\begin{array}{r} 22 < 6c + 4 \\ -4 \quad -4 \\ \hline 18 < 6c \\ 6 \quad 6 \\ \hline 3 < c \\ \boxed{c > 3} \end{array}$$

$$\begin{array}{r} \frac{b}{3} + 12 > -3 \\ -12 \quad -12 \\ \hline \cancel{\frac{b}{3}} + \cancel{\frac{b}{3}} > -15 \cdot \frac{3}{1} \\ \hline \boxed{b > -45} \end{array}$$

$$\begin{array}{r} -\frac{2}{3}x + 8 \leq 2 \\ -8 \quad -8 \\ \hline -\frac{2}{3}x \leq -6 \\ \times \frac{3}{3} \quad \times \frac{3}{3} \\ \hline -2x \leq -18 \\ \div -2 \quad \text{FLIP!} \\ \hline x \geq 9 \end{array}$$

$$\begin{array}{r} 11 > -3y + 2 \\ -2 \quad -2 \\ \hline 9 > -3y \\ \div -3 \quad \text{FLIP!} \\ \hline -3 < y \\ \boxed{y > -3} \end{array}$$

$$\begin{array}{r} 16 - 4a > 8 \\ -16 \quad -16 \\ \hline -4a > -8 \\ \div -4 \quad \text{FLIP!} \\ \hline a < 2 \end{array}$$

$$\begin{array}{r} 4200 + .03x \geq 4500 \\ -4200 \quad -4200 \\ \hline .03x \geq 300 \\ \div .03 \quad \div .03 \\ \hline x \geq 10,000 \\ \boxed{\text{He must sell at least } \$10,000 \text{ of insurance.}} \end{array}$$

32 Solving a two-step inequality is different from solving a two-step equation because you have to worry about the FLIP rule!