

$$\textcircled{1} \quad 325 + .04x$$

* Expression ONLY

↑
remember 4% is written
as .04, since a percent
is out of 100.

\textcircled{2} At least \$475, could be more!

\textcircled{3} inequality, because she wants to make a minimum,
could be more than \$475, the possibilities are
infinite after \$475

\textcircled{4} Greater than or equal to

$$\begin{array}{r} 325 + .04x \leq 475 \\ -325 \qquad \qquad -325 \\ \hline \end{array}$$

$$\frac{.04x \leq 150}{.04 \quad .04}$$

$$x \leq \$3750$$

The sales associate would have to sell at least \$3750
in shoes to take home at \$475.

$$\begin{array}{r} \textcircled{5} \quad 12 > 60 - 6r \\ -60 \quad -60 \\ \hline -48 > -6r \\ \frac{-48}{-6} > \frac{-6r}{-6} \end{array}$$

* Divide by negative, FLIP sign!

$$8 < r$$

REWRITE $r > 8$

$$12 > 60 - 6(9)$$

$$12 > 60 - 54$$

$$12 > 6 \quad \checkmark$$

$$\textcircled{7} \quad 2(k+4) - 3k \leq 14$$

$$2k + 8 - 3k \leq 14$$

$$\begin{array}{r} -1k + 8 \leq 14 \\ -8 \quad -8 \end{array}$$

$$\begin{array}{r} -1k \leq 6 \\ \frac{-1k}{-1} \leq \frac{6}{-1} \end{array}$$

* Divide by neg, FLIP sign!

$$k \geq -6$$

$$\textcircled{6} \quad -5 \leq 11 + 4j$$

$$\begin{array}{r} -11 \quad -11 \\ -16 \leq 4j \end{array}$$

$$\frac{-16}{4} \leq \frac{4j}{4}$$

REWRITE $j \geq -4$

$$-5 \leq 11 + 4(-4)$$

$$-5 \leq 11 - 16$$

$$-5 \leq -5 \quad \checkmark$$

$$\textcircled{8} \quad 3(4c - 5) - 2c > 0$$

$$12c - 15 - 2c > 0$$

$$\begin{array}{r} 10c - 15 > 0 \\ +15 \quad +15 \end{array}$$

$$\frac{10c}{10} > \frac{15}{10}$$

$$c > \frac{3}{2}$$

$$\textcircled{14} \quad \begin{array}{r} 3v - 12 > 5v + 10 \\ -3v \quad \quad -3v \end{array}$$

$$\begin{array}{r} -12 > 2v + 10 \\ -10 \quad \quad -10 \end{array}$$

$$\begin{array}{r} -22 > 2v \\ \frac{-22}{2} > \frac{2v}{2} \end{array}$$

$$-11 > v$$

Rewrite $v < -11$

$$\textcircled{16} \quad -5r + 15 \geq -5(r-2)$$

$$\begin{array}{r} -5r + 15 \geq -5r + 10 \\ -15 \quad \quad -15 \end{array}$$

$$-5r \geq -5r - 5$$

all real numbers

* substitute zero, pos +
neg numbers in to
check!

$$\textcircled{15} \quad 6w + 5 > 2(3w + 3)$$

$$\begin{array}{r} 6w + 5 > 6w + 6 \\ -5 \quad \quad -5 \end{array}$$

$$6w > 6w + 1$$

NO solution

$$\textcircled{17} \quad -2(6+5) < -16 + 2s$$

$$\begin{array}{r} -12 - 2s < -16 + 2s \\ +2s \quad \quad +2s \end{array}$$

$$\begin{array}{r} -12 < -16 + 4s \\ +16 \quad \quad +16 \end{array}$$

$$\frac{4}{4} < \frac{4s}{4}$$

$$1 < s$$

Rewrite $s > 1$