

Inequalities Worksheet Answer Key

Not All Equations Are Created Equal

1.

$$\begin{aligned} -\frac{x}{5} &< 10 \\ -x &< 50 \\ x &> -50 \end{aligned}$$

6.

$$\begin{aligned} \frac{x}{6} &\geq 20 \\ x &\geq 120 \end{aligned}$$

2.

$$\begin{aligned} \frac{x}{7} &< 30 \\ x &< 210 \end{aligned}$$

7.

$$\begin{aligned} x + 9 &\geq 44 \\ x &\geq 35 \end{aligned}$$

3.

$$\begin{aligned} \frac{4x}{5} &> 20 \\ x &> \frac{20 \times 5}{4} = 25 \end{aligned}$$

8.

$$\begin{aligned} x - 32 &\leq 60 \\ x &\leq 92 \end{aligned}$$

4.

$$\begin{aligned} -\frac{2x}{9} &> 20 \\ -2x &> 90 \\ x &< -45 \end{aligned}$$

9.

$$\begin{aligned} \frac{82x}{3} &\leq 12 \\ x &\leq \frac{12 \times 3}{82} = \frac{18}{41} \end{aligned}$$

5.

$$\begin{aligned} \frac{4}{z+4} &\geq 20 \\ 4 &\geq 20z + 80 \\ -76 &\geq 20z \\ z &\leq -\frac{76}{20} = -\frac{19}{5} = -3\frac{4}{5} \end{aligned}$$

10.

$$\begin{aligned} -\frac{6y}{5} &\geq 0 \\ y &\leq 0 \end{aligned}$$

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