

Solving Inequalities Using Multiplication or Division Exit Quiz

Solve each inequality.

1. $\frac{6}{7}a < 12$

2. $2y \geq 9$

Write and solve an inequality.

3. Twenty-four is at most a third of a number.

4. Two thirds of a number is less than -15 .

Write and solve each inequality.

5. Kelly needs to earn at least \$100 per week. If each toy cost \$2.95, how many toys does Kelly need to sell each week?

Solving Inequalities Using Multiplication or Division Exit Quiz**ANSWER**

Solve each inequality.

$$1. \quad \frac{6}{7}a < 12$$

$$\left(\frac{7}{6}\right)\left(\frac{6}{7}a\right) < 12\left(\frac{7}{6}\right)$$

$$a < 14$$

$$2. \quad 2y \geq 9$$

$$\frac{2y}{2} \geq \frac{9}{2}$$

$$y \geq 4.2$$

Write and solve each inequality.

3. Twenty-four is at most a third of a number.

$$24 \leq \frac{1}{3}x$$

$$24(3) \leq \left(\frac{1}{3}x\right)(3)$$

$$72 \leq x$$

4. Two thirds of a number is less than -15.

$$\frac{2}{3}x < -15$$

$$\left(\frac{3}{2}\right)\left(\frac{2}{3}x\right) < -15\left(\frac{3}{2}\right)$$

$$x < -\frac{45}{2}$$

Write and solve the inequality.

5. Kelly needs to earn at least \$100 per week. If each toy cost \$2.95, how many toys does Kelly need to sell each week?

$$2.95x \geq 100$$

$$\frac{2.95x}{2.95} \geq \frac{100}{2.95}$$

$$x \geq 33.8983$$

$$x \geq 33$$