

8.7 Quiz Review

Solve each inequality and graph the solution.

$$1.) x + 3 \geq 1$$

$$\quad \quad \quad -3 \quad -3$$

$$\boxed{x \geq -2}$$

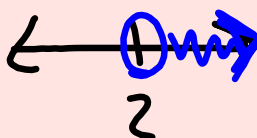


$$2.) 2 - 2x < -2$$

$$\quad \quad \quad -2 \quad \quad \quad -2$$

$$\frac{-2x < -4}{-2 \quad -2}$$

$$\boxed{x > 2}$$

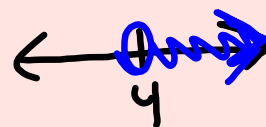


$$3.) 2x + 17 > 25$$

$$\quad \quad \quad -17 \quad -17$$

$$\frac{2x > 8}{2 \quad 2}$$

$$\boxed{x > 4}$$



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Solve each inequality and graph the solution.

$$4.) 6x + 6 < 12$$

$$\quad \quad \quad -6 \quad -6$$

$$\frac{6x < 6}{6 \quad 6}$$

$$\boxed{x < 1}$$

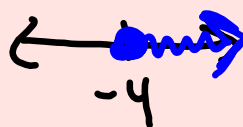


$$5.) \frac{x}{2} - 7 \geq -9$$

$$\quad \quad \quad +7 \quad +7$$

$$2 \cdot \frac{x}{2} \geq -2 \cdot 2$$

$$\boxed{x \geq -4}$$

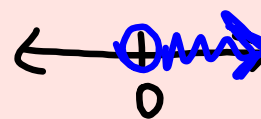


$$6.) 6 < x + 6$$

$$\quad \quad \quad -6 \quad -6$$

$$0 < x$$

$$\boxed{x > 0}$$



8.7 Quiz Review

Brian is saving money to buy a new mountain bike. The bike that he likes costs \$375.95 and he has already saved \$285.50. Write and solve an inequality to find the amount he must still save.

Let m be the amount he must save.

$$m + 285.50 \leq 375.95$$

$$\begin{array}{r} -285.50 \\ -285.50 \end{array}$$

$$m \leq 90.40$$

8.7 Quiz Review

Jin earns \$2,350 per month plus \$45 for each sale he completes. Write and solve an inequality to find how many sales he would have to make each month in order to earn at least \$3,000.

Let s be the sales he makes in a month.

$$2350 + 45s \geq 3000$$

$$\begin{array}{r} -2350 \\ -2350 \end{array}$$

$$\frac{45s}{45} \geq \frac{650}{45}$$

$$s \geq 14$$

$$\begin{array}{r} 29,10 \\ 3000 \\ -2350 \\ \hline 650 \end{array}$$

$$\begin{array}{r} 14.4 \\ 45 \overline{) 650.0} \\ \underline{-450} \\ 200 \\ \underline{-180} \\ 200 \end{array}$$