pp. 68-69, #1-17 odd, #31, #32, #39, #40, #41

#1-7, write the sentence as an inequality.

(1) A number x is greater than 3. $x > 3$

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(3) Fifteen is no more than a number t divided by 5. $15 \leq \frac{t}{5}$

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(5) The sum of a number v and 6.2 is at least -4.7 $v + 6.2 \geq -4.7$

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(7) Three times a number k minus $\frac{5}{3}$ is no more than $\frac{4}{9}$. $3k - \frac{5}{3} \leq \frac{4}{9}$

#9-17, tell whether the value given is a solution of the inequality.

(9) $r + 4 > 8$; $r = 2$

$r > 4$

Since 2 is not greater than 4, it is not a solution to the inequality.

(11) $3s \leq 19$; $s = -6$

$3(-6) \leq 19$

$-18 \leq 19$ ← True!

-6 is a solution to the inequality.

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(13) $-1 > -\frac{x}{2}$; $x = 3$

$-1 \geq -\frac{3}{2}$ ← True!

3 is a solution to the inequality.

(15) $20 \leq \frac{10}{2z} + 20$; $z = 5$

$0 \leq \frac{10}{2z}$

$0 \leq \frac{10}{2(5)} \Rightarrow 0 \leq \frac{10}{10}$ ← True!

5 is a solution to the inequality.

(17) $10.4 \geq -2n + 4.6$; $n = -2.9$

$5.8 \geq -2n$ FLIP!

$-2.9 \leq n$

$-2.9 \leq -2.9$ ← True! -2.9 is a solution to the inequality.

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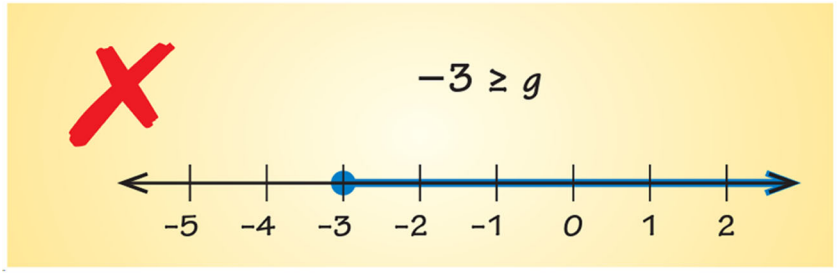
(31)



If $-3 \geq g$, then $g \leq -3$. Arrow is pointing in the wrong direction.

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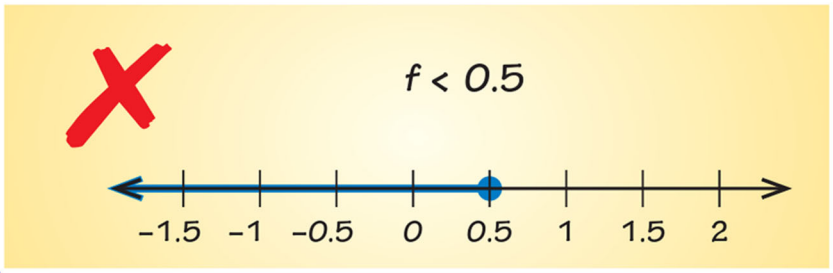
(32)

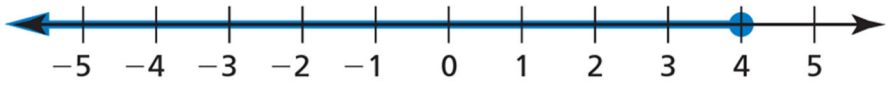


$f < 0.5$

Since f cannot be equal to 0.5, graph should use open circle.

#39-40, write an inequality that represents the graph.

(39)



$n \leq 4$

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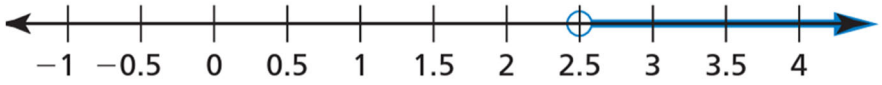
(40)



$n > 2.5$

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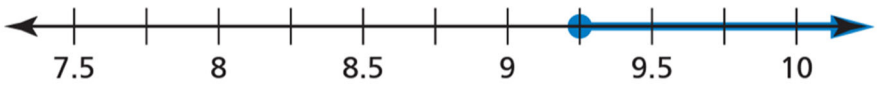
(41) The graph shows the hourly wage requirement n (in dollars) for employees in a state. Write and interpret an inequality that represents the state's hourly wage requirement.



$n \geq 9.25$ Employees must be paid at least \$9.25 per hour.