

Class/Homework

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Questions: 3(aceg), 4, 7(ac) ,8,9,
12,13(aceg)

3. Is each inequality true or false?

Explain your reasoning.

a) $5 < 8$

b) $-5 < -8$

c) $5 < -8$

d) $5 < 5$

e) $5 \leq 5$

f) $0 \geq -5$

g) $5.01 < 5.1$

h) $\frac{1}{5} < \frac{1}{8}$

4. Use a symbol to write an inequality that corresponds to each statement.

a) x is less than -2 .

b) p is greater than or equal to 6 .

c) y is negative.

d) m is positive.

5. Is each number a solution of $x < -2$?

How do you know?

a) 0 b) -6.9 c) -2.001

d) -3 e) -2 f) $-\frac{1}{2}$

6. Write 4 numbers that are solutions of each inequality.

a) $b > 5$ b) $7 > x$

c) $-2 \leq v$ d) $w \leq -12$

- 8.** Define a variable and write an inequality to model each situation.
- a)** A coffee maker can hold no more than 12 cups of water.
 - b)** You must be at least 15 years old to obtain a learner's permit to drive in Nunavut.
 - c)** The maximum seating capacity of a school bus is 48 students.
 - d)** Over 2500 people participate in the charity bike-a-thon each year.
 - e)** The shoe store sells sizes no larger than 13.

9. Match each equation or inequality with the graph of its solution below.

Justify your choice.

a) $m > 3$

b) $p = 3$

c) $k \leq 3$

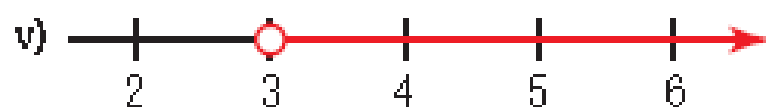
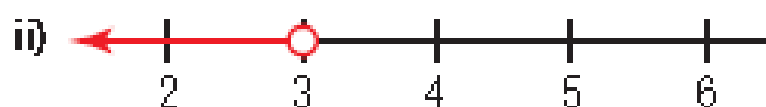
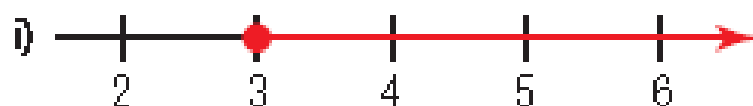
d) $t < 3$

e) $v \geq 3$

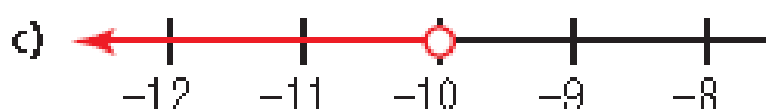
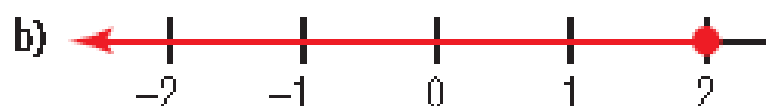
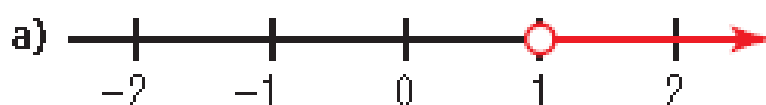
f) $3 < n$

g) $3 \geq h$

h) $3 \leq s$



- 12.** Write an inequality whose solution is graphed on the number line. In each case, are 1 and -3 solutions of the inequality? Explain.



13. Graph the solution of each inequality on a number line.

a) $w > 5.5$

c) $z > -6$

e) $b \leq 6.8$

g) $d \leq -\frac{2}{3}$

b) $x \leq -2$

d) $a < 6.8$

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

h) $x \leq \frac{18}{5}$
