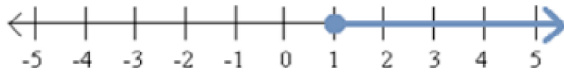


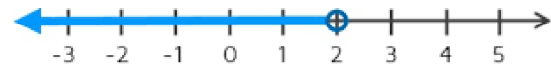
Grade 7: Inequalities/Equation Writing - Study Guide**Write an inequality for the graph.**

1



1.) Inequality: _____

2



2.) Inequality: _____

Write the word sentence as an inequality.

3

The adults in the room are at least 32 years old.

3.) Inequality: _____

4

The maximum cost for a car wash is \$11.

4.) Inequality: _____

Circle “yes” or “no” to tell whether the given value is a solution of the inequality. Please show steps.

5

$j + 7 > 11; j = 4$

5.) Answer: Yes No

Solve the inequality. Graph the solution.

6

$3 \geq x + 4$

6.) Solution: _____

Graph:

7 $\frac{p}{6} > -5$

7.) Solution: _____

Graph:

8 $24 \geq 4v$

8.) Solution: _____

Graph:

9 $\frac{4}{7}x < \frac{1}{3}$

9.) Solution: _____

Graph:

10 $7b + 14 \geq 28$

10.) Solution: _____

Graph:

11 $5(x + 2) \leq 25$

11.) Solution: _____

Graph:

Name: _____

ID: S

Write an equation in symbols that matches the equation written in words. Then, solve it.

- 12 The product of 10 and a number is negative 70.

Equation: _____

Solution: _____

- 13 8 less than a number is 32.

Equation: _____

Solution: _____

- 14 Twice a number added to seven is seventeen.

Equation: _____

Solution: _____

- 15 You are making a dress for your grandma. You buy a bunch of fabric for \$45, and you also buy some buttons, for \$3 each. Your total cost is \$66 before tax. How many buttons did you buy?

Let $x =$ _____

Write an equation: _____

Now solve it!

$x =$ _____

- 16 The Spring Mill stables let you keep your horse, Rocky, in their barn for the summer. You pay a \$29 flat-fee to keep Rocky there for the summer. Then you also pay \$2 for every night he stays. At the end of the summer, your bill is \$149. How many nights did Rocky stay at Spring Mill?

Let $x =$ _____

Write an equation: _____

Now solve it!

$x =$ _____

- 17 *B*O*N*U*S*

- 18 *B*O*N*U*S*

Grade 7: Inequalities/Equation Writing - Study Guide

Answer Section

1 $x \geq 1$

2 $x < 2$

3 $a \geq 32$

4 $c \leq 11$

5 no

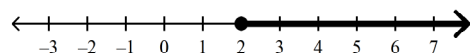
6 $x \leq -1$, solid dot, shade low left

7 $p > -30$, open dot, shade high right

8 $v \leq 6$, solid dot, shade low left

9 $x < \frac{7}{12}$, open dot, shade low left

10 $b \geq 2$;



11 $x \leq 3$; solid dot, shade low left

12 $10n = -70$

$n = -7$

13 $n - 8 = 32$

$n = 40$

14 $2n + 7 = 17$

$n = 5$

15 Let x = the number of bottoms you bought

$3x + 45 = 66$

$x = 7$

16 Let x = the number of nights Rocky stayed at Spring Mill

$2x + 29 = 149$

$x = 60$

17 ??

18 ??