

Concept 7, 8, & 9 Practice

Concept 7- Solving/Writing Equations

Write and solve an equation for the following situations.

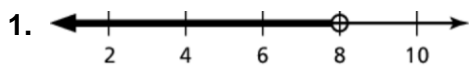
- 1.) Kayla's age is 3 less than twice her brother's age. Kayla is 13 years old. How old is her brother?

- 2.) Your weekly base salary is \$150. You earn \$20 for each cell phone that you sell. How many cell phone were sold if you made \$750 during one week?

- 3.) You are renting a moving truck for a day. There is a daily fee of \$20 and a charge of \$0.75 per mile. How many miles did you drive if your bill was \$65?

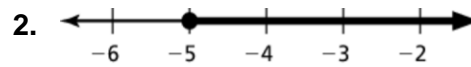
Concept 8- Writing/Graphing Inequalities

Write an inequality for the graph. Then give a possible solution for each.



Inequality:

Possible Solution:



Inequality:

Possible Solution:

Graph the inequality on a number line.

3. $k > 1$

4. $n \leq -2.5$

Write and graph inequality for the situation.

5. In order to try out for one of the parts in a play at the local theater, you must be at most 12 years old.
6. To get a job at the local restaurant, you must be at least 16 years old.
7. You need at least 5000 points to earn a gift card from your bank.
8. You and two friends are diving for lobster. The maximum number of lobsters you may have on your boat is 18.

Concept 9- Solving Inequalities

Solve

1. $3m - 7 < 2$

2. $-13 \leq -5r + 2$

3. $2(b - 4) > -6$

4. $-8(p + 3) \leq 16$

5. $-5(m - 2) > 30$

6. $-\frac{3}{2}(f + 6) \leq -6$