Name\_

# Chapter 7 Review © 2012 Kuta Software LLC. All rights reserved. Solve each inequality and graph its solution.

1) 
$$4 > n - 11$$
  
 $\downarrow 12 13 14 15 16 17$ 
2)  $-10 - 2b < -50$   
 $\downarrow 18 19 20 21 22 23 24 25$ 

#### Translate the verbal phrase into an inequality. Then solve the inequality.

3) The sum of 5x and 4 is less than or equal to 7x.

## Solve each inequality.

4) 
$$-72 \ge -6(7n+5)$$
 5)  $6-2a \le a+8-3a$ 

## Solve each equation.

6) |-5+x| = 157) 6|-5+n| + 9 = 99

## Sketch the graph of each linear inequality.





#### Chapter 6 Review Applications

Write and solve an inequality to find the possible values of x.

1) area > 72



2) Mr. Brust has 3 kids and each year he has 1.5 more kids (on average). He wants to have no more than 18 kids.

Write and solve an inequality for the above situation.

3) Mr. Sullivan is losing...Jeopardy that is. Going into Final Jeopardy he has \$5400. He decides to wager \$5299 on the last question knowing that if he gets it right he wins the money and if he gets it wrong he loses the money.

Write and solve an absolute value equation for the situation.

5) Mr. Brust and Mr. Kelly enter the DoDDS celebrity Putt-Putt tournament. Their score is sum of Mr. Brust's score and doubling Mr. Kelly's score. They need to have a combined score of no more than 75 strokes.

- a) Write an inequality with x representing Mr. Brust's strokes and y representing Mr. Kelly's strokes.
- b) Would they move on if Mr. Brust shot 20 strokes and Mr. Kelly shot 30 strokes?
- c) How many strokes would Mr. Brust need to shoot if Mr. Kelly shot a 28?