## PRACTICE QUIZ:

Name:\_

## Solving for a variable / Intro to inequalities

Solve for the specified variable.

| 1)         | F = ma for m                                | 2)      | $P = \frac{F}{A}  \text{for } F$ |  |
|------------|---|---------|----------------------------------|--|
| #1 answ    | ver:  | #2 ansv | ver:                             |  |
| 3)         | $a = rac{v_f - v_i}{t}$ for v <sub>f</sub> | 4)      | $s = \frac{d}{t}$ for t          |  |
|            |   |         |                                  |  |
|            |   |         |                                  |  |
| #3 answer: |   |         | #4 answer:                       |  |
| 5)         | PV = nRT for R                              | 6)      | 3x – y = 8 for x                 |  |
|            |   |         |                                  |  |
|            |   |         |                                  |  |
| #5 answer: |   |         | ver:                             |  |

7) The odometer in your car uses the equation  $s = \frac{d}{t}$  to determine how far you've traveled. Solve the equation  $s = \frac{d}{t}$  for "d". Then determine the distance a car has traveled if its average speed is 40 mi/hr and it's been traveling for 4 hours.

#7 equation: \_\_\_\_\_

#7 answer: \_\_\_\_\_

| For 8–10, Circle the number (s) that are solutions to the given inequality? |             |       |            |       |            |  |  |  |  |
|---|-------------|-------|------------|-------|------------|--|--|--|--|
| 8)  | x > 5       | a) 5  | b) 11      | c) –6 |            |  |  |  |  |
|   |             |       |            |       |            |  |  |  |  |
| 9)  | -9 ≤ x      | a) —3 | b) –9      | d) 0  |            |  |  |  |  |
|   |             |       |            | ,     |            |  |  |  |  |
|   |             |       |            |       |            |  |  |  |  |
| 10)   | 2x – 3 ≤ 11 | a) 0  | b) 4       | c) –4 |            |  |  |  |  |
|   |             |       |            |       |            |  |  |  |  |
| Graph the following inequalities:   |             |       |            |       |            |  |  |  |  |
| 11)   | x < -7      |       | 12) 14 ≤ x |       | 13) −3 > x |  |  |  |  |
|   |             |       |            |       |            |  |  |  |  |
| •   |             |       | •          |       | •          |  |  |  |  |

For 14 & 15, write an inequality for each.

14) (-5 -4 -3 -2 -1 0 1 2 3 4 5)

#14 answer: \_\_\_\_\_

15) Mr. Roy is hoping at least 21 students earn an A on this quiz.

#15 answer: \_\_\_\_\_