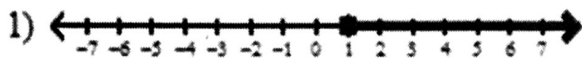


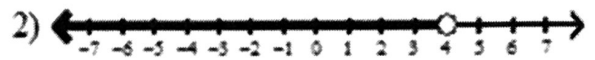
Solving Inequalities HW

Name KEY

Write an inequality for each graph.



$$x \geq 1$$



$$x < 4$$

Solve each inequality.

$$3) \frac{x}{12} \leq -3$$

$$x \leq -36$$

$$5) 10 \geq 17 + n$$

$$-17 \quad -17$$

$$-7 \geq n$$

$$4) -16 \geq a + 4$$

$$-4 \quad -4$$

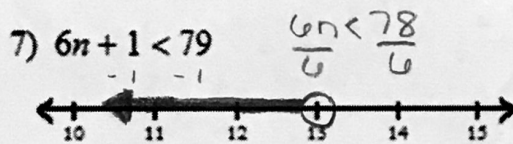
$$-20 \geq a$$

$$6) k + 16 < 24$$

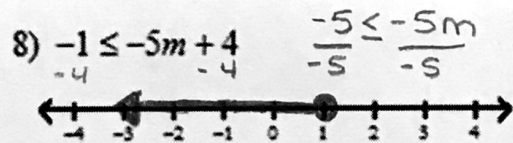
$$-16 \quad -16$$

$$k < 8$$

Solve each inequality and graph its solution.



$$n < 13$$

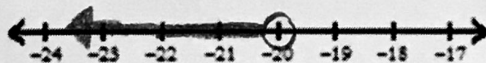


$$1 \geq m \text{ so } m \leq 1$$

$$9) -3 > \frac{r-7}{9}$$

$$-27 > r - 7$$

$$+7 \quad +7$$

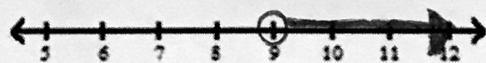


$$-20 > r \text{ so } r < -20$$

$$10) \frac{3+x}{2} > 6$$

$$3+x > 12$$

$$-3 \quad -3$$



$$x > 9$$

Solve each inequality.

- 11) In a math class at the community college, only five chapter exams are given and an 80% must be achieved in order to take the state exit exam. Pam has completed the first four exams with scores of 71, 84, 79, and 81. Write an inequality to find the minimal score Pam can make on the fifth exam in order to take the state exit exam?

$$\frac{71+84+79+81+x}{5} \geq 80$$

$$x \geq 85\%$$

$$(5) \frac{315+x}{5} \geq 80(5) \quad 315+x \geq 400$$

$$-315 \quad -315$$

- 12) Your school is having a fall carnival. Admission into the carnival is \$3 and each game inside the carnival costs \$.25. Write an inequality that represents the possible number of games that can be played having \$10. What is the maximum number of games that can be played?

$$3 + 0.25x \leq 10$$

$$-3 \quad -3$$

$$\frac{0.25x}{0.25} \leq \frac{7}{0.25}$$

$$x \leq 28 \text{ games}$$