Name: _____ Date: _____

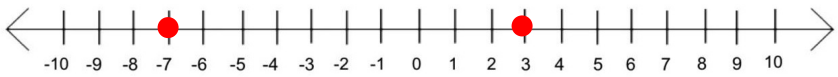
**CW # 1-2:** Algebra 1 - Sections 2-5 to 2-7 30 points

1. *Solve each equation for the given variable*:

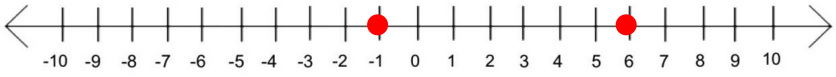
| $(a)\ \lvert 2x-3 \rvert = 11$ | $(b)\ 3 \lvert x-4 \rvert + 1 = 10$ | $(c)\ \lvert x+4 \rvert = -2$ |
|---|---|---|

2. *Write (but don't solve) an absolute value equation for the following.*

(a)




(b) *Write (but don't solve) an absolute value equation for the following.*



Name: _____ No work No credit Date: _____

**CW # 1-2:** Algebra 1 - Sections 2-6 to 2-7 15 points

1. Solve each proportion:

(a) $\frac{4}{n+2} = \frac{7}{n}$

(b) $\frac{5}{r-9} = \frac{8}{r+5}$

(c) $\frac{n-6}{n-7} = \frac{9}{2}$

2. Write and Solve each proportion:

(a) The ratio of boys to girls in Ms. Alper's math classes is 5 : 7. If there are 60 students in all of her classes, how many are boys?

(b) Three pumps can remove a total of 1700 gallons of water per minute from a flooded mineshaft. If engineers want to remove at least 5500 gallons per minute, how many pumps will they need operating?

Name: _____ No work No credit Date: _____

**CW # 1-2:** Algebra 1 - Sections 2-6 to 2-7 15 points

3. Solve each literal equation for the given variable:

(a) $ax + by = c$ for $y$

(a) $R = C(1 + r)$ for $r$

(a) $S = 2\pi rh$ for $r$

(a) $V = \frac{KT}{P}$ for $T$

(a) $2x - 5y = 20$ $for\ y$

(a) $-3x + 7y = 14$ $for\ y$