$\qquad$

## SHOW ALL WORK to receive full credit.

Graph the following inequalities on the number line. ( 2 points each)

1. $x \leq-2$

2. $x>0$

3. $3 \leq x$

4. $1>x$


Solve and graph the following inequalities on the number line. (4 points each)
5. $x-4 \geq 1$

6. $-2 x-3<5$

7. $8 x-3<4 x-11$

8. $-3(x-5) \geq 2 x+5$


On the same grid, graph the line and label your lines a-c. (4 points each)
9. Line "a" $\quad y=-\frac{1}{3} x+6$
10. Line "b" $y=\frac{5}{2} x-2$
11. Line "c" $y=-3 x$


Graph both lines and label the point of intersection: (6 points: 2 pts. per line, 2 pts. for intersection.)
12. $y=2 x-2$ and $y=-\frac{1}{2} x+3$

Point of intersection: $\qquad$


Solve the following equation. Show all work. Answer must be reduced to lowest terms. Answer may be given as an improper fraction or a mixed number. (4 points each)
13. $\frac{2 x+4}{-3}=\frac{x-2}{4}$
14. $-6(3 x-5)+6=7-(4 x+9)$
$\qquad$

## SHOW ALL WORK to receive full credit.

Graph the following inequalities on the number line. (2 points each)

1. $x \leq-3$

2. $x>2$


Solve and graph the following inequalities on the number line. (4 points each)
3. $x+5 \geq 1$

4. $-4 x+1>5$

5. $-3 x+5<2 x-10$

6. $6(2 x+5) \geq 6 x+18$


Use PEMDAS to simplify the following expressions. (3 points each)
7. $26-2 \cdot 8+3=$ $\qquad$
9. $14-12(5-1)=$ $\qquad$ 10. $16+16 \div 8 \cdot 4=$ $\qquad$

On the same grid, graph the line and label your lines a-c. (4 points each)
11. Line "a" $y=-\frac{3}{4} x-5$
12. Line "b" $\quad y=\frac{1}{4} x+3$
13. Line "c" $y=-x+4$


Graph both lines and label the point of intersection: ( 6 points: 2 pts . per line, 2 pts . for intersection.)
14. $y=x+4$ and $y=-\frac{4}{3} x-3$

Point of intersection: $\qquad$


## Algebra Foundations Quiz \#30 Week 11 Friday

Name $\qquad$

## SHOW ALL WORK to receive full credit.

Graph the following inequalities on the number line. (2 points each)

1. $x \leq-5$

2. $3<x$


Solve and graph the following inequalities on the number line. (4 points each)
3. $6 x-5 \geq 13$

4. $-4 x-2>-18$

5. $3(4+7 x) \geq 6(3 x+6)$

6. $8-3 x-10+5 x<6 x-9+x-3$


## Use PEMDAS to simplify the following expressions. (3 points each)

7. $4+18 \div 2 \cdot 3=$ $\qquad$
8. $7^{2}-(9-6)^{2} \cdot 4=$ $\qquad$

On the same grid, graph the line and label your lines a-c. (4 points each)
11. Line "a"

$$
y=-\frac{4}{3} x+7
$$

12. Line "b" $y=3 x+1$
13. Line "c" $y=-x-2$


Graph both lines and label the point of intersection: (6 points)
14. $y=-2 x-1$ and $y=\frac{2}{3} x+7$

Point of intersection: $\qquad$


