Algebra Foundations Quiz #15 Week 6 Monday   Name_____

SHOW ALL WORK to receive full credit.

Evaluate. (1 point each)

1. $5^4 =$

2. $(-6)^4 =$

3. $-2^4 - 4^2 =$

4. $12^0 - 3^2 =$

5. $-18 + 5 =$

6. $-13 - (-7) =$

Simplify the following exponent problems. Answers should have one positive exponent. (2 point each)

7. $(x^{-5})^{-2} =$

8. $x^{-3} \cdot x^{-2} =$

9. $\dfrac{x^{-10}}{x^8} =$

10. $(x^7)^{-9} =$

11. $x^{-8} \cdot x^5 =$

12. $\dfrac{x^{-4}}{x^{-5}} =$

Fractions: Perform the indicated operation. Answers must be left as <u>proper</u> fractions or mixed numbers. Answers must be reduced to lowest terms. (1 points each)

13. $7\frac{1}{2} \cdot \frac{6}{35} =$

14. $8\frac{2}{9} - 4\frac{2}{3} =$

15. $3\frac{1}{5} + \frac{1}{4} =$

16. $2\frac{8}{9} \div 8 =$

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (4 points each)

17. $\dfrac{4}{3x-2} = \dfrac{-3}{2x+5}$

18. $6x + 15 = -8x - 21$

Give the ordered pairs of each point. (1 point each)

19. A_____   20. B_____

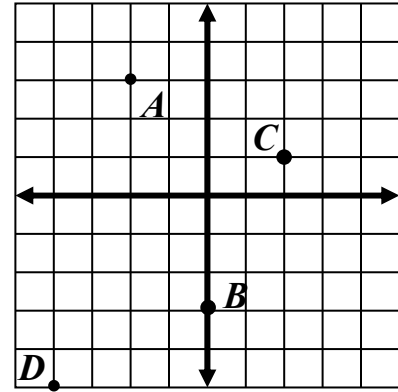21. C_____   22. D_____

Graph and label each of the following ordered pairs on the grid to the right. (1 point each)

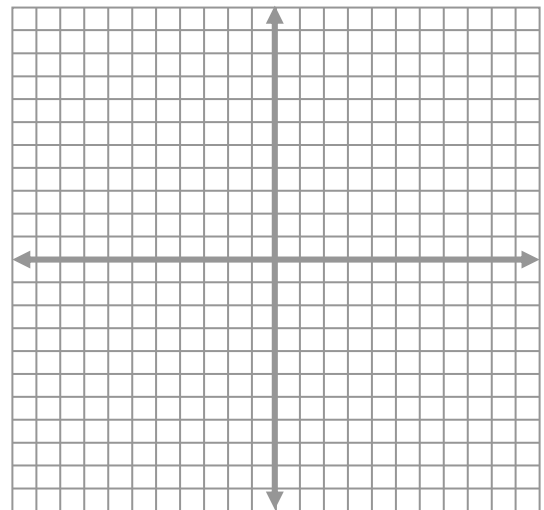23. $E(-2,0)$ 24. $F(-1,5)$

25. $G(0,1)$ 26. $H(4,-3)$

Use for problems
19 – 26

Complete the domain-range table, and graph the line. (12 points)

27.

x	$y = -3x - 4$	y
-3		
-2		
-1		
0		
1		
2		

20 points

Algebra Foundations Quiz #16   Week 6 Tuesday   Name_____

SHOW ALL WORK to receive full credit.

Simplify the exponents. (1 point each)

1. $(x^3)^{-7} =$
2. $x^{-2} \cdot x^{-7} =$
3. $\dfrac{x^3}{x^4} =$

4. $(x^3)^{-4} =$
5. $x^{12} \cdot x^{-20} =$
6. $\dfrac{x^{-3}}{x^{-4}} =$

Fractions: Perform the indicated operation. Answers must be left as <u>proper</u> fractions or mixed numbers. Answers must be reduced to lowest terms. (1 points each)

7. $3\frac{1}{4} \cdot \frac{8}{25} =$
8. $5\frac{1}{3} - 2\frac{5}{6} =$

9. $\frac{7}{10} + \frac{3}{4} =$
10. $\frac{8}{9} \div 3 =$

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (4 points each)

11. $\dfrac{-7}{-5x-1} = \dfrac{4}{3x-1}$
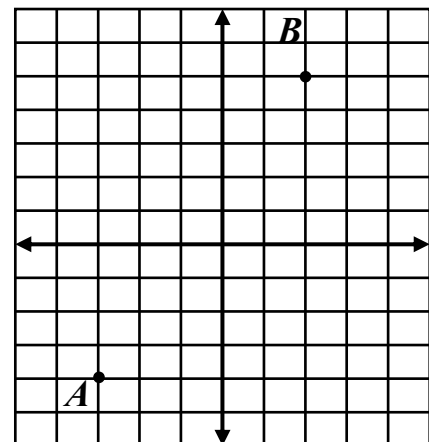12. $4 - 5x - 2 - (-7) = 6x$

Give the ordered pairs of each point. (1 point each)

13. A_____
14. B_____

Graph and label each of the following ordered pairs on the grid to the right. (1 point each)
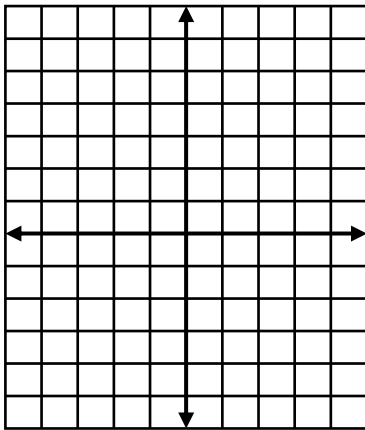
15. C $(-1, -3)$
16. $D(1,5)$

22 points
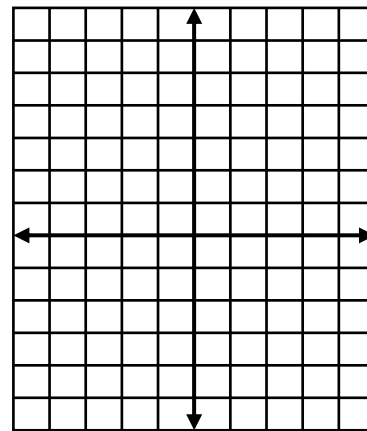
Complete the domain-range tables, and graph the lines. (20 points)

17.

x	$y = \frac{1}{2}x - 1$	y
−4		
−2		
0		
2		
4		

18.

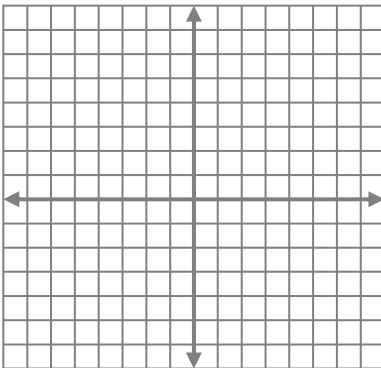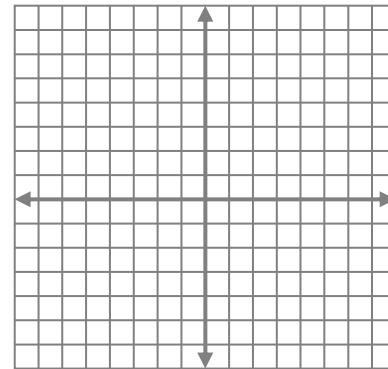| x	$y = -2x + 3$	y
−2		
−1		
0		
1		
2		

Plot the points, create a slope triangle, and determine the slope. Reduce to lowest terms. (4 points each)

19. $(3,\ 1)$ and $(-4, -2)$

slope: _____

20. $(-4, 3)$ and $(2, -3)$

slope: _____

28 points