Integrated Math 1 Chapter 3 Test Review Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Show All Work on Another Paper for Full Credit

1. Write the equation of the line that goes through the point  and has a slope of 

2. Write the equation of the line that goes through the point  and has a slope of 

3. Write the equation of the line that goes through the points  and .

4. Write the equation of the line that goes through the points  and .

5. Write the equation of the line that goes through the points  and .

6. Write an equation for the line that is parallel to the given line and that passes through the given point:

a.  b.  c. 

7. Write an equation for the line that is perpendicular to the given line and that passes through the given point:

a.  b.  c. 

**8. The points *A*(–1,6), *B*(–1,2), and *C*(–7, 2) form Δ*ABC*.**

If you reflect (flip) Δ*ABC* across the *y*-axis to create Δ *A' B' C',*

what are the coordinates of *A' \_\_\_\_\_\_\_\_\_\_\_*

b. If you rotate (turn) Δ*ABC* (the original) 90° counterclockwise about the origin to create Δ *A" B" C"*,

what are the coordinates of *A"\_\_\_\_\_\_\_\_\_\_\_\_*

c. Calculate the area of Δ*ABC.*

d. What would you expect the area of Δ *A' B' C'* to be? How do you know?

**For each of the following 9-11 Multiply out using the generic rectangles then**

a. Write the area of the rectangle as a ***product*** and as a ***sum***

b. Find the perimeter (combining like terms)

9. 10. 11.

–4

3x

7x

1

–9

11x

4x

7

–3

5x

2x

5

12 through 15: Rewrite each product as a sum by multiplying.

12.  13.  14.  15. 

For 16 through 21 Simplify each (NO DECMIALS):

16.  17.  18. 

19.  20.  21. 

22. Simplify each of the exponents. Remember there should be no negative exponents in the final answer:

a.  b.  c.  d. 

For 23 through 26 Fill in the missing dimensions **and** find the areas of each of the following

23. 24.

5

3y

5x

3xy

15

x2

4x

9

25. 26.

6

2y

12x

2xy

18

x2

15x

8

For 27 through 32 Solve the equation below for x. SHOW YOUR WORK!

27.  28.  29. 

30.  31.  32. 