Week 30 Homework: April 13-16, 2015

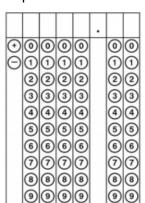
1. Solve for a. You must show work!

$$6a + 42 - 2a = 5a - 23$$

2. Solve for b. You must show work! -3b + 5 > 155

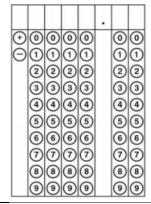
3. Solve and round to the tenths place.

$$\frac{-53}{6} + \sqrt{81}$$

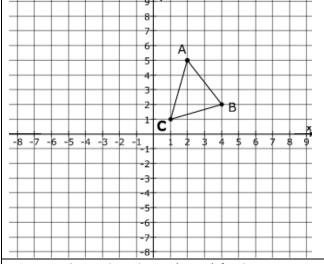


4. Solve and round to the hundredths place.

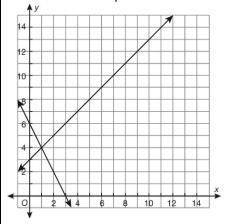
$$-78 + 5^3 - \sqrt{49}$$



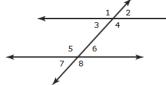
5. Dilate Triangle ABC by the rule (2x, 2y)



6. What ordered pair satisfies both equations?



- 7. Does the ordered pair (5, 10) fit the equations y = 3x and y = -1x + 6?
- 8. If the measure of angle 4 is 114° what will angle 5 be?



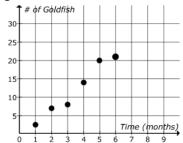
9. Convert to scientific notation.

0.000000789

10. Will this be a proportional or non-proportional line? Explain why.

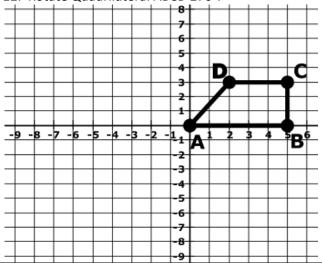
$$y=-\frac{1}{4}x$$

11. A pet store is raising gold fish and tracking the number of fish they have each month. If the trend continues, what would be a fair total amount of goldfish the store will have in 9 months?



13. Brianna can read 50.25 pages in one day. She has already read 75 pages of her book. She needs to have at least 400 pages ready before her next book club meeting. Write an inequality and let d represent the number of days it will take for her to read at least 400 pages. BONUS: solve for d ©

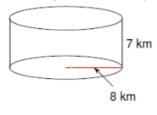
12. Rotate Quadrilateral ABCD 270°.



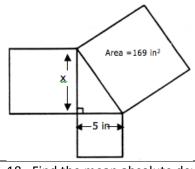
14. What is the equation of table?

Hours	0	3	6	9	
Cost	\$50.00	\$95.00	\$140.00	\$185.00	

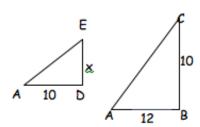
15. Find the total surface area using 3.14 for pi and rounding to the tenths place.



16. Find the value of x.



17. Find the value of x if both triangles are similar.



18. Find the mean absolute deviation of the temperatures of both cities. Whose has the largest deviation?

Temperatures (°F)											
Dallas, TX				Chicago, IL							
60	52	20	47	21	46	38	50	24	42		

19. If the rule (x+5, y-4) was applied to point D in number 12, what would be the new ordered pair of D'?

20. Calculate the amount of interest that would be earned with a simple interest account if \$2400 were deposited at a rate of 8.5% for 5 years.