

To: Students scheduled to take Honors Geometry
From: Mrs. Manchette
Re: Honors Geometry Summer Review Assignment
Date: June 15, 2018

The purpose of this assignment is to help you recall and retain previously learned Algebra 2 concepts from previous years. There is little or no time for review in Honors Geometry as the course is designed to prepare you for a rigorous Honors Pre-Calculus course. You may be assessed on these concepts within 3 weeks of returning to school in the fall.

You may seek assistance from a tutor, on-line sources or you may work with others in the class. However; it is important for all work to be shown and be your own. Copying the answers from a class mate is considered cheating and will result in a grade of zero for the assignment. ***Realize the point of this assignment is to prepare you for a challenging and rewarding experience in Honors Geometry and *the new common core curriculum*.

Honors Geometry is an in-depth study of Euclidean geometry and advanced geometrical reasoning and proof. You have been recommended for this course because of your past academic performance, work ethic and enthusiasm for the subject matter. As an accelerated student it is your responsibility to ***Be An Active Learner***. To accomplish this you must complete all assignments thoroughly, read and study the textbook, and check all answers before coming to class. ***This review assignment is an opportunity for you to demonstrate your ability to work independently and problem solve. You will get the best results if you give it 100% effort.***

Specific Assignment Requirements:

- ✓ Do all work in *pencil*.
- ✓ Show *All Work* for each question.
- ✓ The assignment will be collected by the end of the first week of school in the fall.
- ✓ Late work will receive significant deductions.

If you have questions regarding this assignment you may contact Mrs. Manchette amanchette@nssk12.org over the summer.

Name: _____

Narragansett High School - Summer Review Packet 2018

(for students entering Honors Geometry, after completing Honors Algebra 2)

SHOW ALL WORK NEATLY AND CIRCLE ANSWERS.

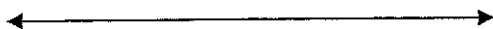
I. Solve

1. $2(k + 1) = 5(k - 2)$

2. $\frac{1}{2} = \frac{2}{3}b + \frac{1}{6}b$

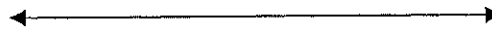
3. Solve and Graph solution below.

$$3(r + 2) - 2r \leq 4$$



4. Solve and Graph Solution below.

$$12 \leq \frac{14 + 17 + a}{3} \leq 16$$



5. $|5t - 4| \geq 16$

6. Solve the proportion...

$$\frac{2}{3x+1} = \frac{1}{x}$$

7. Solve the proportion...

$$\frac{x+5}{7} = \frac{x+3}{5}$$

II. Solve the quadratic equations... Be sure to factor when appropriate and use quadratic formula, when factoring not possible.

7. $(x - 7)(x + 3) = 0$

8. $m^2 + 15m + 36 = 0$

9. $m^2 - 49 = 0$

10. $2m^2 - 32m + 128 = 0$

11. $2m^2 + 4m - 7 = 0$

12. $15t^2 + 14t - 8 = 0$

11. A train moving at a constant speed travels 260 miles in 5 hours. At this rate, how many miles does the train travel in 9 hours? Explain and show your work.

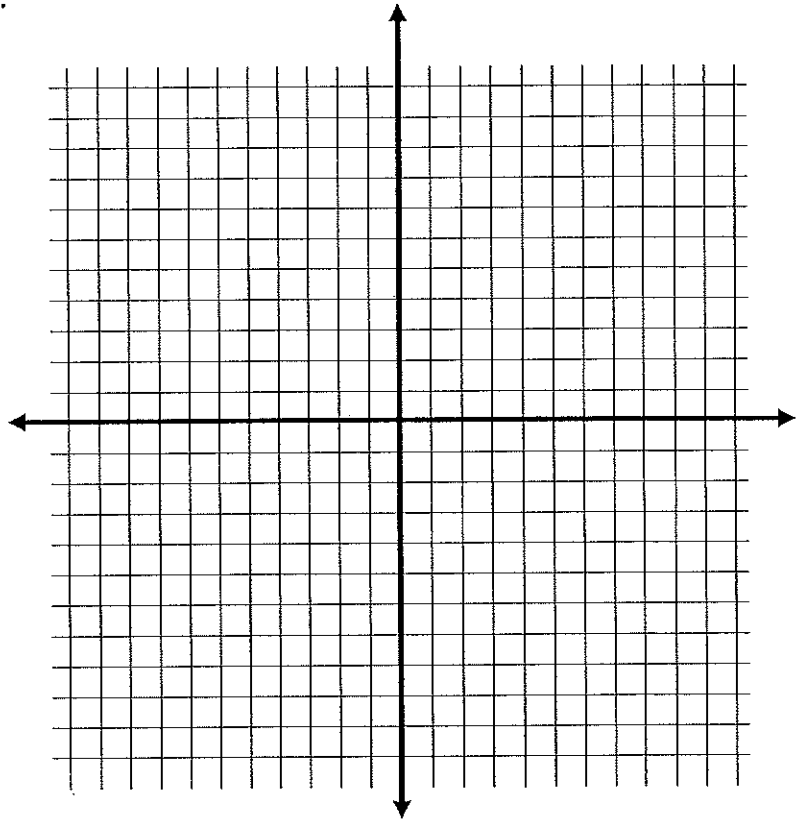
12. You start a pet washing service. You spend \$30.00 on supplies and you plan to charge \$5.00 per pet.

a. Write an equation relating your income to the number of pets you wash.

b. Graph the equation. Label the axes.

c. Explain the real world meaning of the **slope**.

d. Explain the realworld meaning of the **y-intercept** in this situation.



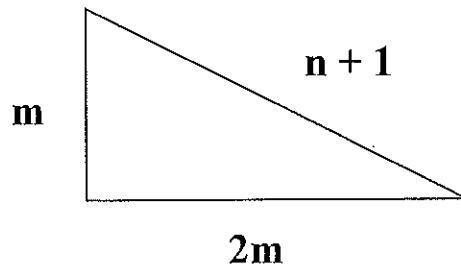
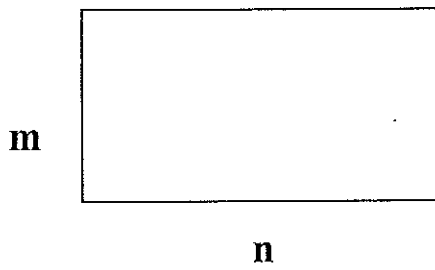
e. If your goal is to earn \$400 to buy a new I-Phone 6, how many pets will you have to wash?

13. Solve the system...

$$9x + 5y = 34$$

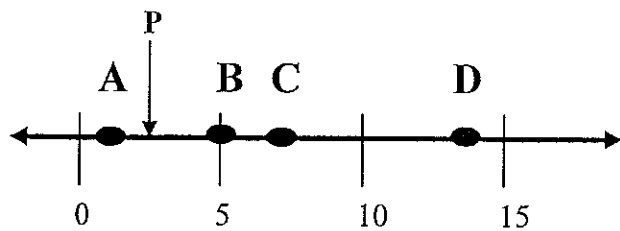
$$8x - 2y = -2$$

14. The perimeter of the rectangle is 34 cm. The perimeter of the triangle is 30 cm. Find the values of m and n . Write a system of equations and solve.



15. Simplify $\frac{4a^2 - 16}{2a}$

16. Review the number line below...



If point P represents \sqrt{x} , which point is closest to the value of x ? Explain your choice.

Point A

Point B

Point C

Point D

Determine whether the following pairs of lines are *parallel*, *perpendicular*, or *neither*.

Explain your answer...

17. $y = x + 3$

$$y = -x + 3$$

18. $y = 2x - 6$

$$y = 2$$

19. $y = -\frac{2}{3}x + 1$

$$y = -\frac{2}{3}x - 4$$

Write the equation of each line described.

20. The line has slope of 6 and contains $(-3, 5)$.

21. The line is perpendicular to $y = 2x + 17$ and contains $(8, -1)$.

22. The line passes through $(6, 4)$ and $(-3, 1)$.

