Alg 1 Week 17 Block Warm Up Final starts next week

1. Skill 19: Multiply and Divide Rational Expressions. Simplify completely.

$$\frac{3x^2+2x-1}{x^2-1} \div \frac{5}{10x-10}$$

2. Skill 20: Construct a box and whisker plot for a set of data, and find the mean and range.

1,1,1,3,5,7,7,7,8,8,12

3. A dartboard has 12 equally sized sections numbered 1 to 12.
   a. What is the probability of throwing a dart that lands on an even number?

   b. What is the probability of throwing a dart that lands on a multiple of 6?

Wk 17 Block CW

This will be collected today and graded !

Talk or Text?

NAME _____

Good news! Your parents just said that they would buy you your first cell phone and prepay $25 each month for the plan of your choice. To make the best decision, you've found the two plans below. Compare the cell phone plans and choose the one that's right for you.

	VOICE MINUTES	TEXT MESSAGES
PLAN A	5¢/minute	15¢/message
PLAN B	10¢/minute	5¢/message

1. If you choose to only send text messages, which plan will allow you to send the most? How many will you be able to send?

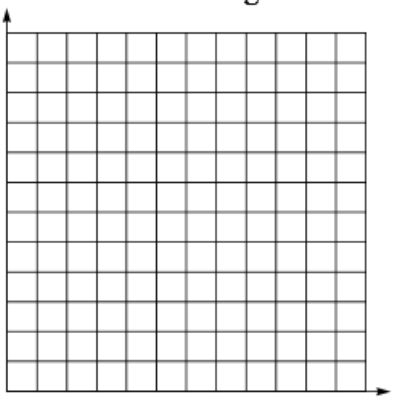
2. If you choose to only talk on the phone, which plan will allow you to talk the longest? How long will you be able to talk?

3. If you talk for a total of two hours in a month, how many texts will you be able to send under Plan A? under Plan B?

4. Create names for Plan A and Plan B that clearly communicate the benefits of each plan to potential customers.

5. Write an equation for each plan to represent the number of text messages (x) and the number of voice minutes (y) you will be able to use with the \$25. You should have a separate equation for each plan.

6. Graph the two equations on the same coordinate grid.



7. Where do the graphs of the equations intersect? What does this point represent?

8. Which plan would you choose? Why? Use mathematical reasoning in explaining your choice.

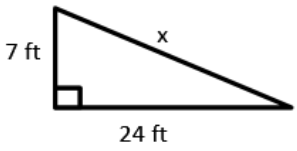
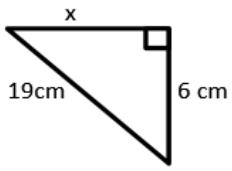
Time for Week 17 assessments:

Skills 19.4, 20.3

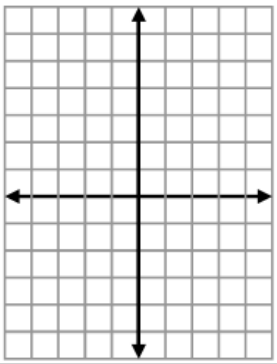
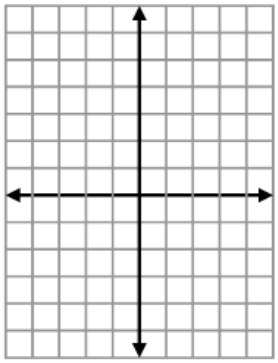
CW/HW: Final Review Block

Week 17

Alg 1 Wk 17 Block Final Review Name_____

Solve each equation: (1-6) $2+5k=3k-6$	2. $3(3m-2)=2(3m+3)$	3. $6(3a+2)-30=3a-3(3a-4)-6$
4. $\frac{5x-4}{10}=\frac{4}{5}$	5. $\frac{2n-4}{5}=\frac{3n+3}{10}$	6. In 2 years Starbucks opened 232 stores. At this rate, how many new stores will they open in the next 3 years?
7-9. Find the missing side, round to the nearest tenth.  	8.  	*9.* Find the diagonal of a SQUARE, with side length 5m.

Pictures not drawn to scale!!!!

10. Find the slope of the line containing (-2,3) and (4,-8).	11. What is the slope and the y-intercept of $y = -\frac{2}{3}x + 8$ Slope=_____ y-intercept=_____	12. Find the equation of the line that goes through (-2,-9) and (3,-16)
13. Graph $y = x^2 - 4$ 	14. Graph $3y - 5x = 15$ 	15. Solve using quadratic formula. Round to nearest hundredth. $4x^2 - 4x = 11$
16-18. Solve the system of equations: $x + 2y = 6$ $3x - 4y = 28$	17. $y = 2x + 1$ $3x + y = -9$	18. $2x + y = 4$ $-2x + y = -4$