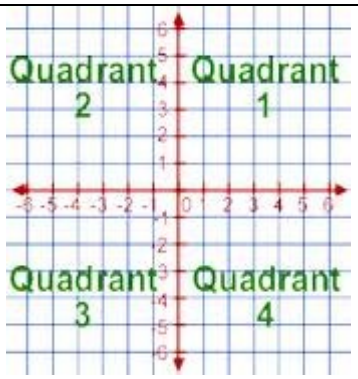
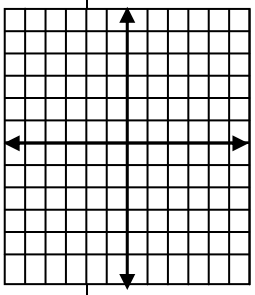
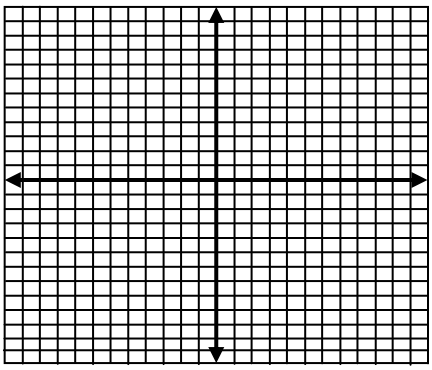
Name_____

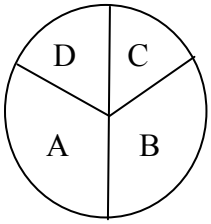
Grissom Jr. Math Explorers 5th Grade Test
2012-2013

1. Name one of the two types of probability.	
2. Which axis represents horizontal (left and right) direction?	
3. Which axis represents vertical (up and down) direction?	
4. What is the probability of an impossible event?	
5.  In which quadrant is the point (4,-8) located? A. I B. II C. III. D. IV	
6. Write an equation that models this situation: Two more than twice the number of hours Taylor spends walking a week is eight. Let x= the number of hours she walks a week.	
7. Solve the equation you wrote in question number 6 for x.	
8. When solving an equation for a variable, you use _____ operations A. Inverse B. Converse C. Adverse D. Universe	
9. What is the midpoint formula, given (X_1, Y_1), (X_2, Y_2)? A. $(\frac{x_1 * x_2}{2}, \frac{y_1 * y_2}{2})$ B. $(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2})$ C. $(\frac{x_1 - x_2}{2}, \frac{y_1 - y_2}{2})$ D. $(\frac{x_1 + y_1}{2}, \frac{x_2 + y_2}{2})$	
10. A jar contains 5 nickels, 8 quarters, and 2 pennies. Upon drawing a coin from the jar, you flip the coin. What is the probability that you will draw a nickel and the result when you flip the coin will be heads? *Remember to reduce your answer!*	

11. When you roll a die, what is the probability of not rolling a prime number? (1 is not prime). A. 1/2 B. 1/6 C. 1/3 D. 0	

12. What is the midpoint of (2,8) and (0,4)	
13. Solve for x: 2x+8=17. *Write your answer as an improper fraction*.	
14. If one fair six-sided die is rolled, and a coin is flipped, what is the probability that the die will show 5 and the coin will show heads? A. 1/12 B. 1/6 C. 1/3 D. 1/2	
15. What is the probability of choosing a red card out of a deck of cards (without jokers), and flipping a coin and getting heads?	
16. How likely is an event with a probability of 1 A. Unlikely B. Impossible C. Certain D. Likely	
17. Jiaqi's cat, Boris, is sick and needs to go to the vet. If she goes on a straight path from her house at (0, 0) to the vet's office at (12, -20), and this takes her one hour, at what point will she be after 45 minutes?	
18. Which of these is not divisible by either 9, 10, or both. A. 1780 B. 765 C. 6390 D. 7685	
19. Graph (2, -3) 	
20. If an ace represents a 1, and all face cards (Jack, Queen, and King) represent a 10, what is the probability of drawing an odd numbered spade from a deck of cards?	

21. Which dot is located at the point (-5, 10)? 	
22. Numbers that are divisible by 10 are *always* also divisible by what two numbers?	

23. Solve for x: 2x+18=9x-3 A. x=2 B. x=3 C. x=9 D. No solution	
24. Which of these choices is 57 divisible by? A. 3 B. 4 C. 2 D. 9	
25. Twice the number of sushi rolls that Evan can eat in one sitting is 8 less than 32. How many sushi rolls can he eat in two sittings?	
26. A spinner like this one shown is constructed:  (drawing not to scale) Section A is 1/3 of the area, section B is 1/3 of the area, and sections C and D are the same fraction of the remaining area. What is the probability of spinning and not getting pink?	
27. 10 Dolphins, 8 Seahorses, 1 Manatee, and 6 Sea Lions are having an undersea conference. If a secretary general is randomly chosen from these animals, what is the probability that the secretary general will be neither a manatee nor a sea lion	
28. Raisa is running to the movie theatre to see the new *Arrested Development* movie! If she begins at her friend Nick's house, located at (-3, -7), and ends at the theatre, located at (-9, 7), where will she be halfway between the theatre and Nick's house? A. (-3, -6) B. (-6, 0) C. (-6, -3) D. (0, -6)	
29. A number that ends in 5 must be divisible by what number?	
30. Solve for x: ½ x+15=3x	