MasterMath

4th Quarter Exam

Name _____

Date _____

Closed Book; 90 minutes to complete

CUCC; You may use a calculator.

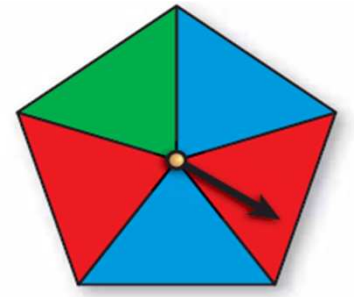
1. **Assume you will be given one pencil. State the probability as a percentage.**

What is the Probability that if one pencil is assigned to you, it will be orange?

What is the Probability that you will be assigned a yellow or a green pencil?

What is the probability that you will not be assigned a red pencil?

2. **Based upon this colored spinner, answer these questions:**



What is the probability of landing on red?

What is the probability of landing on blue or green?

3. **What is the probability that you spin the number wheel twice, and get a 6 on the first spin and a 7 on the 2nd spin?**

4. **You pick a marble, don't replace it, then pick a 2nd marble. What is the probability that the first is red and the 2nd is purple?**

5. **You are handed two rocks from this group. They were chosen at random. What is the probability that neither is red?**

Picture shows a yellow, a green, a red, a purple, another yellow, and a blue painted rock.

6. **Convert this equation to Function Form: 3x + 6 - 2 = 2y + 4**

7. **Solve this equation using a table. Check your solution.**

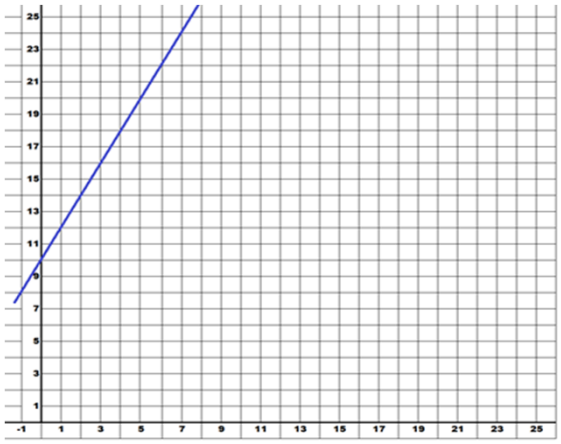
3x = 5x - 6 **x =**

x						
3x						
5x - 6						

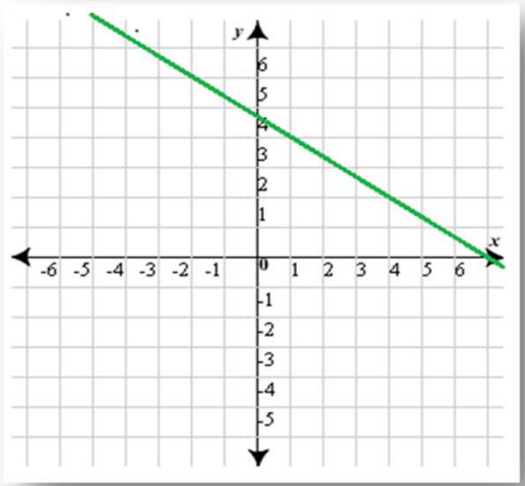
8. **Use algebra to solve this equation: .5x + 3.5 = 4x - 7**

x =

9. **Write an equation in slope-intercept form that describes this graph:**

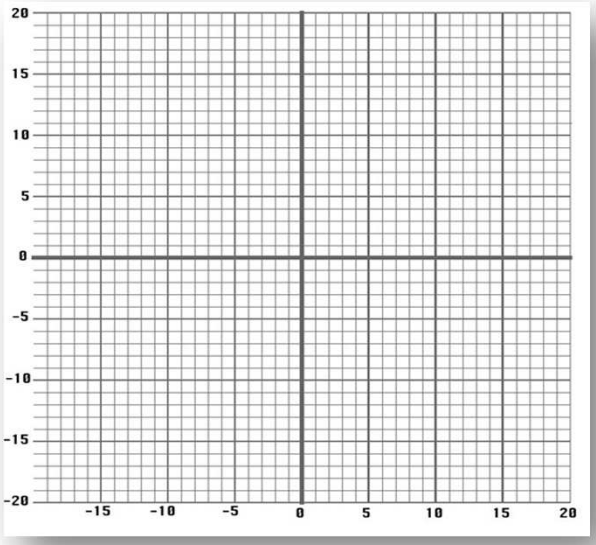


10. **Find the slope of this line.**

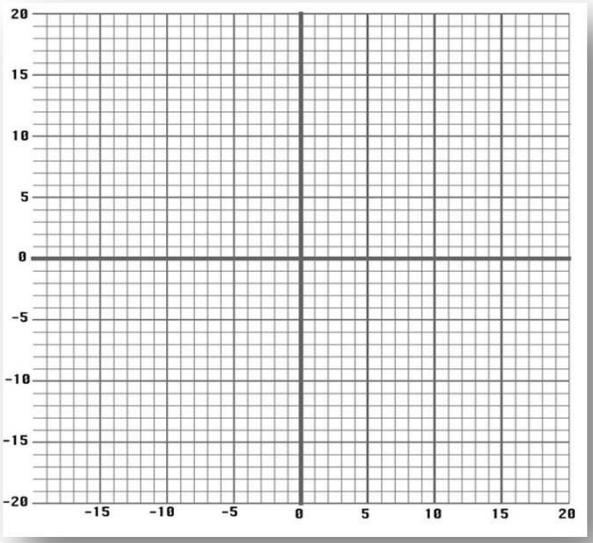


11. **Two points on a line are (-4, 6) and (2, 9). What is the slope of the line?**

12. **(8, 20) is on a line with a slope of +2. Draw the line.**



13. **Two points on a line are (8, -6) and (10, -9). What is the equation of the line?**



14. **If we subtract 6 from a number multiplied by 2, it equals the number times 4. What is the number?**

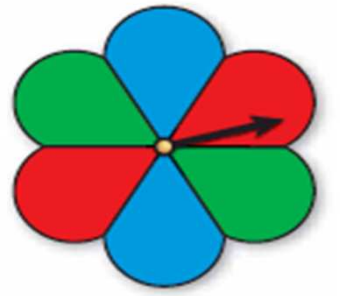
15. **Solve for x:** $6(1.5x + 2.5) = 24$

16. **Thirty-six 7th graders are at the dance. There are 4 more girls than boys. How many boys are at the dance? How many girls?**

Boys	Girls

17. **The colored wheel is spun 50 times, and the results are shown in the table below. Answer these questions:**

blue	red	green
15	18	17



What was the Experimental Probability of landing on red?

What is the Theoretical Probablility of landing on red?

What was the Experimental Probability of not landing on red?

18. **If you roll a die like the one pictured, what would be the Theoretical Probability of each of these events:**

Rolling a number less than 3

Rolling an odd number

19. **From a deck of 52 playing cards, what is the probability that if you draw one card, it will be a 2, 3, 4 or 5? (The deck has 4 suits, each with a 2,3,4,5,6,7,8,9,10, jack, queen, king and ace)**

20. **y = 6. Solve 4(x + 2y) - 4y = 12** **x =**

21. **Twenty-three less than 6 times the quantity of a number (x) decreased four equals seven. Find the number.**

22. **You are twice as old as your brother. You are 7 years older than your brother. How old is your brother (b)?**

23. **Solve for z: 2(z + 2) - 5 = 7**

Results			
%	?'s	Wrong	Concept
1			
1			
1			
1			
1			
1			
1			
1			
1			
1			
1			
1			
1			
1		0	