Name: _____ Period: _____ Date: _____

Answer the following questions. Make sure to SHOW YOUR WORK on a separate piece of paper.

1. Simplify: $-\dfrac{1}{3} - \dfrac{3}{5}$

2. Solve and graph $-2x + 3 < 2$

3. How can you determine if a graph is proportional or not?

4. Ms. Edgington owes Mr. Sackett $5.36. If she pays him $3.54, how much does she still owe him? Plot your answer on a number line.

5. The yearbook staff is selling yearbooks in advance so they know how many yearbooks they can order. The equation $y = 35x$ represents the amount of money, y, the yearbook staff receives for x books sold. What is the unit rate, or constant of proportionality?

Use the following table for the next 3 questions.

Hour(s), x	5	10	15	20
Miles Traveled, y	20	40	60	80

6. Find the unit rate in miles traveled per hour.
7. Write the equation for the table above.
8. If you have travelled for 7 hours, how far have you gone?
9. Fill in the missing values in the proportional table below.

Number of Chocolate Kisses	Calories
9	200
	400
27	600
36	

Constant of Proportionality_____
Equation:_____

10. Solve and graph: $-\dfrac{5}{7}y - 4 \le \dfrac{1}{14}$

11. Mr. Sackett gets $30 every time he gets hired to teach a tap dance. He also gets $25 per hour he spends teaching the dance. If he earned $305 dollars, how long did he spend teaching the dance?

12. The Dance Team is going to hold a car wash to raise money. They are going to charge $3 per car washed. How many cars would they need to wash if they want to make $224?

13. Solve for x: $-3x - 12 = 32$

14. How can you determine if a table is proportional or not?

15. Simplify: $-15 \div 3 \cdot 5 + (15 - 20)$

16. Solve for x: $-5x + 1 \ge 4$

17. Will the following side lengths make a triangle? Explain your reasoning.
2 in, 4 in, 6 in

18. Will the following angles make a triangle? Explain your reasoning.
$30°, 40°, 110°$

19. Explain how you would teach a 6th grader how to classify a triangle by angle measures.

20. Explain how you would teach a 6th grader how to classify a triangle by side lengths.

21. If a bike normally costs $659, but is on sale for 45% off. How much does the bike cost now?

22. Your bill at a restaurant is $42.55. If you want to leave a 16% tip, what is the final cost of your meal?

23. If you roll a 10-sided die, find P(NOT multiple of 3)

24. You are pulling candies out of a bag. The bag has 5 Snickers, 4 Butterfingers, and 8 Milky Ways. What is P(Butterfinger or Snickers)?

25. If you flip a coin 3 times, what is the probability of getting at least two tails?