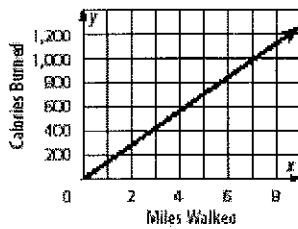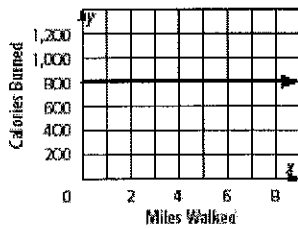# End of nine week Review

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Rafael walks 2 miles and burns 300 calories every day. Which graph best represents the relationship shown in the table?
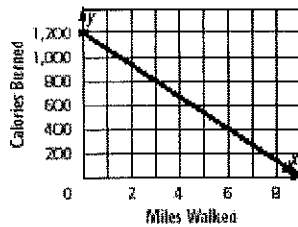
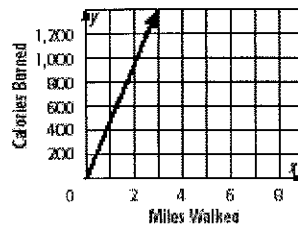| Miles Walked	Calories Burned
2	300
4	600
6	900
8	1,200

a.

b.

c.

d.

2. The table shows the relationship between the number of days a library book is overdue d, and the fine f, when the book is overdue.

d (days)	1	2	3	4	5
f (cents)	10	20	30	40	50

Which of the following equations represents the relationship?
a. $d = 10f$
b. $f = d + 10$
c. $f = 10d$
d. $f = 10(d + 1)$

3. Which value is missing in the table?

n	0	4	6
2(n + 3)	6	14	?

a. 15
b. 18
c. 24
d. 36

4. Which expression can be used to find the nth term in the following arithmetic sequence, where n represents a number's position in the sequence?

Position	1	2	3	4	n
Term	5	9	13	17	?

a. $3n + 4$
b. $5n$
c. $4n + 1$
d. $n + 4$

5. What is the 7th term of the following sequence?
$-4, -6, -8, \ldots, -2n - 2, \ldots$
a. -16
b. -14
c. -12
d. -10

Short Answer

6. The table shows six popular sports according to the results of a survey. Find the decimal value of those who liked each sport. Thenfind the decimal value of those who liked volleyball and basketball.

Sport	Fraction
Baseball	$\frac{5}{8}$
Soccer	$\frac{3}{4}$
Football	$\frac{3}{8}$
Basketball	$\frac{2}{3}$
Volleyball	$\frac{2}{7}$
Tennis	$\frac{1}{5}$

7. The school assembly was performed by $\frac{2}{3}$ of the Jazz band, $\frac{4}{5}$ of the Drama Club, and by $\frac{5}{8}$ of the Orchestra. Which group had the greatest part of its group perform at the assembly?

8. Jack scored 82 questions correct on a test with a total of 90 questions.Write his score as a fraction, and then write its decimal equivalent. Round your answer to the nearest hundredth.

9. Mrs. Anderson's class went to get creamy whip. Mrs. Anderson bought each student one ice cream cone. $\frac{3}{4}$ of her class ordered orange/vanilla swirl, and $\frac{2}{3}$ of her class ordered chocolate. What is wrong with this question?

10. Christa is going to enter a baking contest. She would like to make a total of 5 pies so she can choose the best one as her entry. If Christa's crust recipe calls for $2\frac{1}{4}$ cups flour, and she has 12 cups of flour, does she have enough to make 5 pies? If so, how much, if any, flour will she have left?

11. Josè wants to bake cinnamon coffee cakes to give as gifts to his teachers at the end of the school year. Each coffee cake requires $\frac{1}{4}$ cup cinnamon. How many coffee cakes can he make with $1\frac{1}{2}$ cups cinnamon? How much, if any, cinnamon will he have left?
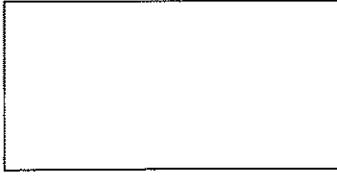
12. Alex is making some trail mix for his scouting hike. He mixes together the ingredients in the table. How much total trail mix does he have when he is finished combining the ingredients?

Ingredients	Amount
Pretzels	$1\frac{3}{4}$ cups
Raisins	$1\frac{1}{4}$ cups
Cereal	$2\frac{1}{4}$ cups
Nuts	$\frac{3}{4}$ cup
Chocolate Candies	1 cup

13. Find the area of the rectangle with a width of $5\frac{1}{2}$ inches and a perimeter of $20\frac{1}{2}$ inches.

15. Sam needs to order 6 buckets of fried chicken for his daughter's graduation party, and he wants to get the best deal possible. Petey's chicken is $16.99 a bucket, and Sam has coupons good for $5 off each bucket. Ken's chicken is $22.99 a bucket, but they are running a special "buy 1 bucket, get 1 bucket free" offer. Which is more cost effective? What will be his total cost at this restaurant?

17. A $4\frac{1}{3}$ carat diamond is cut into 3 smaller diamonds without waste. If two of diamonds weigh $\frac{3}{4}$ and $1\frac{1}{3}$ carats respectively, how many carats does the third diamond weigh?

14. In order to attend the 6th grade field trip to the state's capital, each student will need $12.50 for the chartered bus ride and $7.00 for food. If there are 80 students attending, how much money will be collected for this field trip?

16. Terry finishes $\frac{1}{5}$ of his weekly homework on Monday night, $\frac{1}{6}$ on Tuesday night, and $\frac{1}{3}$ on Wednesday night. What fraction of his homework does he still have left to do?

18. Michelle spent one-half of her summer vacation at camp, one-fifth of her vacation babysitting and one-fourth visiting her grandmother. What part of her vacation was left for her to relax at home?

1. Find the sum $87.0021 + 14.12 + 20 + 11.013$.

2. $36.3 - 18.08 =$ _____

3. $19.071 - 10.49 =$ _____

4. Convert 4,320,000 to scientific notation.

5. Write 0.00000000956 in scientific notation.

6. Convert 3.001×10^{-9} to standard notation.

7. Change 5.21×10^4 to standard notation.

8. A sixth-grade class decides to purchase a rabbit as a class mascot. Each of the twenty-two students in the class donates 75¢ towards the purchase. How much money do they have to purchase the rabbit?

9. Joy's new car gets 23.5 miles per gallon of gasoline. How far can she drive on a tank of gas if the tank holds 13.3 gallons?

10. A person makes \$6.78 an hour. How many hours does that person have to work in order to earn \$257.64?

11. As a fund raiser, the crafts club is selling decorated eggs. The eggs cost \$1.32 per dozen and the club sells them for 25¢ each. How much profit does the club make on the sale of 3 dozen eggs?

12. What is $3\frac{1}{4} \cdot \frac{4}{13}$?

13. Simplify: $\frac{1}{6} \div \frac{1}{3}$

14. What is $7\frac{1}{2} \div \frac{2}{3}$?

15. Simplify: $3\frac{3}{5} \cdot 1\frac{2}{3}$

16. Simplify: $4\frac{1}{2} \times 3\frac{1}{3}$

17. Simplify: $\frac{1}{6} + \frac{5}{8}$

18. $\frac{3}{8} + \frac{5}{6} + \frac{2}{3} =$ _____

19. What is $9\frac{3}{4} - 2\frac{15}{16}$?

20. $4\frac{5}{8} - 1\frac{11}{12} =$ _____

21. Mr. Schaeffer has $10\frac{2}{3}$ meters of fabric. He uses $3\frac{1}{6}$ meters to make a cover for his computer. How much fabric does Mr. Schaeffer have left?