Unit 1 Review

KEY

Georgia Online Formative Assessment Resource (GOFAR)

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1. Jake drew this line segment to show the length of his dog's hair.

- The length of the line segment is 2 inches.
- The length of Miranda's hair is 12 inches.

$12 \div 2 = 6$

Which expression could be used to show the number of times longer Miranda's hair is than the dog's hair?

A) 4×3

B) 2×6

C) $4 + 8$

D) $2 + 10$

2. Jackie bought a bag of oranges.

- She used $\frac{3}{8}$ of the oranges to make orange juice. $\frac{9}{24}$
- She used $\frac{1}{3}$ of the oranges to make a fruit salad. $\frac{8}{24}$
- She put $\frac{1}{8}$ of the oranges in a bowl on the table. $\frac{3}{24}$
- She put $\frac{2}{12}$ of the oranges in the refrigerator. $\frac{4}{24}$

Which statement is true?

A) Jackie left more oranges on the table than she put in the refrigerator.

B) Jackie used fewer oranges to make orange juice than she left on the table.

C) Jackie put fewer oranges in the refrigerator than she used to make the fruit salad.

D) Jackie used more oranges to make a fruit salad than she used to make orange juice.

3. A club with 124 members is planning a camping trip. They need to rent cabins and tents for sleeping.

- Eight members can sleep in each cabin.
- Two members can sleep in each tent.
- They plan to rent as many cabins as they can fill.

$124 \div 8 = 15.5$

15 cabins

$4 \div 2 = 2$

2 tents

How many tents does the club need to rent?

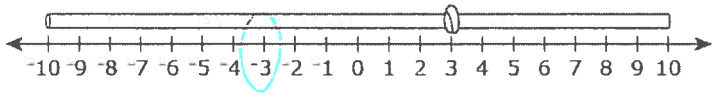
A) 2

B) 4

C) 15

D) 62

4. A group of kids were playing tug of war during a picnic. The location of the knot on the rope is shown on a number line.



Which value is opposite the location of the knot?

A) $\frac{1}{3}$

B) $-\frac{1}{3}$

C) 3

D) −3

5. After paying their monthly expenses, the two owners of a shop have *p* dollars of profit. They put $\frac{1}{2}$ of the money in the bank and spend $\frac{1}{3}$ of it on advertising. The two owners will share the remaining money equally as a bonus. Which expression represents the bonus, in dollars, that each person will receive?

A) $\frac{1}{12}p$

B) $\frac{3}{10}p$

C) $\frac{1}{3}p$

D) $\frac{5}{6}p$

$1 - \frac{1}{2} - \frac{1}{3}$

$\frac{6}{6} - \frac{3}{6} - \frac{2}{6} = \frac{1}{6}$

$\frac{1}{6} \div 2 = \frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$

6. A recipe calls for 4 eggs, but Mara only has 3. She decides to adjust the amounts of the other ingredients proportionally. The original recipe calls for $1\frac{1}{2}$ cups of sugar. Which expression represents the amount of sugar, in cups, Mara should use?

A) $\frac{3}{2} \div \frac{1}{4}$

B) $\frac{3}{2} + \frac{1}{4}$

C) $\frac{3}{2} \cdot \frac{3}{4}$

D) $\frac{3}{2} + \frac{3}{4}$

$\frac{3}{4} \times 1\frac{1}{2}$

$\frac{3}{4} \times \frac{3}{2}$

$345 \times .01 = 3.45$

$142 \times .10 = 14.20$

$60 \times .25 = 15.00$

32.65

7. Each night Ann and her family empty their pockets, purses, and wallets and place all of the pennies, nickels, dimes, and quarters in a large container. At the end of the month, Ann helps her father count the coins. If Ann counted 345 pennies, 142 dimes, and 60 quarters, how much money did she count?

A) $32.65

B)$47.65

C)$385.45

D)$547.00

8. **Which of the following best represents $\sqrt{39}$? A number between —**

A)3 and 4

B)6 and 7

C)7 and 8

D)8 and 10

$\sqrt{36}$ $\sqrt{49}$

6 7

9. Which of the following shows the numbers ordered from **least** to **greatest**?

A)0.004, 0.07, 0.6, 0.32

B)0.004, 0.6, 0.07, 0.32

C)0.004, 0.07, 0.32, 0.6

D)0.004, 0.32, 0.07, 0.6

0.004 1
0.070 2
0.600 4
0.320 3

10. The profits and losses of six different stores are shown in the table below.

Store	A	B	C	D	E	F
Net Profit/Loss	$250	-$184	-$256	$198	$346	-$120

What is the range of the data for Net Profit/Loss among the six stores?

A)$602

B)$370

C)$148

D)$90

lowest - (-256)

highest - (346)

346 + +256 = 602

11.

Marcus has $40 in his pocket. Joseph has twice as much as Marcus, Jenna has half as much as Marcus, and Sam has one-third as much as Marcus. Order the individuals based on the amount of money they have from least to greatest.

A)Sam, Jenna, Marcus, Joseph

B)Jenna, Sam, Marcus, Joseph

C)Sam, Jenna, Joseph, Marcus

D)Joseph, Marcus, Jenna, Sam

3 Marcus - 40
4 Joseph - 80
2 Jenna - 20
1 Sam - 40 ÷ 3 = 13.33

12. The mass of one atom of aluminum is 26.9816 amu (atomic mass unit). Aisha wants to round this mass to the nearest hundredth. What reasoning should Aisha use?

A)round to 26.98 because $1 < 5$

B)round to 26.99 because $8 \geq 5$

C)round to 26.981 because $1 < 5$

D)round to 26.982 because $5 \geq 5$

13. The table shows the names and times of the first-place swimmer and second-place swimmer in the men's 100 meter (m) backstroke.

Men's 100 m Backstroke

Place	Name	First 50 m	Last 50 m
1st	Matthew	25.36 seconds	26.80 seconds
2nd	Franco	25.63 seconds	27.29 seconds

52.16
52.92

0.76

The total time for each swimmer is the sum of the two parts. How much faster did the first-place swimmer swim than the second-place swimmer?

A)0.24 seconds

B)0.66 seconds

C)0.76 seconds

D)0.84 seconds

14. Mr. Lowery has $8\frac{3}{4}$ pounds of ground beef that he will use to make hamburgers for a picnic. What is the maximum number of quarter-pound hamburgers he can make?

A)9

B)17

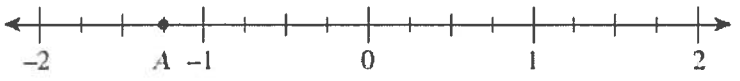
C)35

D)36

$8\frac{3}{4} \div \frac{1}{4}$

$\frac{35}{4} \div \frac{1}{4} = 35$

15. Which of the following **best** represents the location of point *A* on the number line shown below?



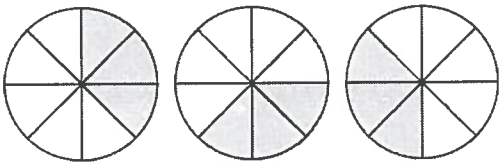
A) $-2\frac{3}{4}$

B) $-2\frac{1}{4}$

C) $-1\frac{1}{2}$

D) $-1\frac{1}{4}$

16. Heather has equal sections of cheese in 3 different cheese trays. The shaded parts of each circle represent the fraction amount of cheese left in each tray.



$\frac{3}{8}$

Which expression represents the total fraction amount of cheese in the trays?

A) $3 + \frac{1}{8}$

B) $3 \times \frac{1}{8}$

C) $9 \div \frac{1}{8}$

D) $9 \times \frac{1}{8}$

17. Tyrone weighed 1 box of macaroni on a scale and found it weighed 0.6 pounds. What could Tyrone do to find the total weight of 100 boxes of macaroni?

A) Divide 0.6 by 10^3.

B) Divide 0.6 by 10^2.

C) Multiply 0.6 by 10^2.

D) Multiply 0.6 by 10^3.

18. Which situation would result in a value of 0?

A) Melvin has $50 and pays $35 for two shirts.

B)Alice sells 14 out of 15 candy bars.

C)Tammy buys a vase for $24 and then returns it for a refund of $24.

D)Bob exercises 45 minutes on Monday and 45 minutes on Wednesday.

19. Ben wanted to run with his dad during a race. His dad was running a marathon, which has a distance of 26.2 miles. Ben's goal was to run with his dad for $\frac{3}{4}$ of the total distance. However, Ben only was able to run $\frac{5}{6}$ of his goal. How many miles, to the nearest tenth, did Ben run?

A)9.3 miles

$26.2 \times \frac{3}{4} = 19.65$

B)16.4 miles

C)21.0 miles

$19.65 \times \frac{5}{6} = 16.4$

D)23.6 miles

