

3. A recipe for a mixed berry pie calls for 5 ounces of blackberries for every 9 ounces of raspberries. Which of the following statements is true?
- A. The recipe calls for $\frac{5}{14}$ ounce of blackberries for every ounce of raspberries.
 - B. The recipe calls for $\frac{14}{5}$ ounce of blackberries for every ounce of raspberries.
 - C. The recipe calls for $\frac{5}{9}$ ounce of blackberries for every ounce of raspberries.
 - D. The recipe calls for $\frac{9}{5}$ ounce of blackberries for every ounce of raspberries.
4. Tito went to a concert given by a jazz band. The band had 5 saxophone players and 4 trumpet players. What was the ratio of trumpet players to saxophone players in the band?
- A. 4:9
 - B. 4:5
 - C. 5:4
 - D. 5:9
5. Peter and Randy run a refreshments stand at a minor league baseball park. The ratio of cups of lemon juice to cups of water in their lemonade is 2:10. Which unit rate best describes how Peter and Randy make their lemonade?
- A. $\frac{1}{4}$ cup of water for every cup of lemon juice
 - B. $\frac{1}{5}$ cup of water for every cup of lemon juice
 - C. $\frac{1}{4}$ cup of lemon juice for every cup of water
 - D. $\frac{1}{5}$ cup of lemon juice for every cup of water
6. Mariluz will be spending her vacation at her uncle's house in the mountains. She drove the 582 kilometers from her home to her uncle's house in 6 hours. At what rate did Mariluz complete her trip?
- A. 0.01 kilometer per hour
 - B. 79 kilometers per hour
 - C. 97 kilometers per hour
 - D. 100 kilometers per hour

7. Jackson analyzes polling results for elections across the country. Over the last 10 years, Jackson has correctly predicted the winner of an election 78% of the time. Which of the following statements best describes Jackson's results?
- A. For every 100 elections, Jackson has predicted the winner 78 times.
 - B. For every 1,000 elections, Jackson has predicted the winner 78 times.
 - C. Jackson predicted the winner of 78 of the last 100 elections.
 - D. Jackson predicted the winner of the last 78 elections.
8. Yukiko plays on the softball team at her school. The team won 9 of its first 12 games. At that rate, how many games will Yukiko's team win if it plays 64 games in all?
- A. 45
 - B. 48
 - C. 50
 - D. 58
9. Miles rode his mountain bike over some trails in a state park. He biked a total of $5\frac{1}{2}$ miles. How many yards did Miles bike? There are 1,760 yards in a mile.
- A. 320 yd
 - B. 8,800 yd
 - C. 9,680 yd
 - D. 29,040 yd
10. A natural food market sells organic granola in bulk for \$1.60 per ounce. Which of the following statements is true?
- A. It would cost \$0.20 to buy 8 ounces of granola at the market.
 - B. It would cost \$13.60 to buy 12 ounces of granola at the market.
 - C. It would cost \$16.16 to buy 16 ounces of granola at the market.
 - D. It would cost \$38.40 to buy 24 ounces of granola at the market.

12. Jeffrey builds wooden decks for his clients' houses. His standard deck uses a fixed amount of lumber. The table below shows how much lumber Jeffrey needs to buy for different numbers of decks.

Lumber Needed

Number of Decks	Lumber (in sq ft)
2	1,052
3	1,578
4	2,104
5	2,630
6	3,156
7	?

Based on the data in the table, how much lumber would Jeffrey need to buy to build 7 standard decks?

- A. 3,682 square feet
 - B. 3,718 square feet
 - C. 4,208 square feet
 - D. 6,312 square feet
13. An adult male giraffe can have a mass of as much as 1,360 kilograms. What is 1,360 kilograms in grams?
- A. 1.36 g
 - B. 136 g
 - C. 13,600 g
 - D. 1,360,000 g

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14. During the last school year, the students at Hayes High School and McGovern High School organized volunteers to clean up two city parks and collect recyclable items. The tables below show the average number of kilograms of recyclables collected for different numbers of volunteers for each high school.

Hayes High School

Number of Volunteers	Recyclables Collected (in kg)
3	30.15
4	40.20
5	50.25
6	60.30
7	70.35

McGovern High School

Number of Volunteers	Recyclables Collected (in kg)
3	26.55
4	35.40
5	44.25
6	53.10
7	61.95

Based on the data in the tables, which of the following statements is true?

- A.** On average, the volunteers from Hayes High School collected 2.1 more kilograms of recyclables per person than the volunteers from McGovern High School.
- B.** On average, the volunteers from McGovern High School collected 2.1 more kilograms of recyclables per person than the volunteers from Hayes High School.
- C.** On average, the volunteers from Hayes High School collected 1.2 more kilograms of recyclables per person than the volunteers from McGovern High School.
- D.** On average, the volunteers from McGovern High School collected 1.2 more kilograms of recyclables per person than the volunteers from Hayes High School.

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16. Felipe makes salads at a restaurant. On average, Felipe can make 12 salads in 20 minutes. At that rate, how many salads could Felipe make in 45 minutes?
- A. 27
B. 30
C. 56
D. 75
17. A carabiner is a key piece of equipment for a mountain climber. Kneisl's Mountain Adventures store is having a sale on carabiners. During the sale, you can buy 4 carabiners for \$29.60. What is the unit price of the carabiners?
- A. \$7.15
B. \$7.40
C. \$8.15
D. \$118.40
18. At the local greenmarket, Debra bought 5 ounces of Chinese long beans for \$13.55. At that rate, how much would she pay for 8 ounces of Chinese long beans?
- A. \$20.08
B. \$20.88
C. \$21.68
D. \$22.48
19. What is 45% of 120?
- ~~A. 5.4
B. 6.6
C. 54
D. 66~~
20. As part of a science project, Liam grew two pumpkins in his backyard. Pumpkin A weighs $14\frac{1}{2}$ pounds and Pumpkin B weighs 248 ounces. Which of the following statements is true of the pumpkins? (1 lb = 16 oz)
- A. Pumpkin A weighs 16 ounces less than Pumpkin B.
B. Pumpkin B weighs 16 ounces less than Pumpkin A.
C. Pumpkin A weighs 24 ounces more than Pumpkin B.
D. Pumpkin B weighs 24 ounces more than Pumpkin A.

25. At a local farmer's market, Jodi bought 3 pounds of Ashmead's Kernel apples for \$4.47 at the McDougal Orchards stand.
- A. At that rate, how much would it cost Jodi to buy 5 pounds of Ashmead's Kernel apples? Show your work.

- B. Brannen's Orchards also sells apples at the farmers' market. At that stand, you can buy 4 pounds of Ashmead's Kernel apples for \$6.12. At which stand are Ashmead's Kernel apples a better buy: McDougal Orchards or Brannen's Orchards? Explain your answer.

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Solve the problems below.

8. A length of rope measures $\frac{5}{8}$ of a yard long. Rylan would like to cut it into two equal portions. How long should each portion measure?

9. A bottle of vegetable oil holds 5 cups. A recipe for cookies requires $\frac{2}{3}$ of a cup of oil. How many recipes could you make with the bottle of vegetable oil?

10. The area of a rectangular shape measures $\frac{5}{8}$ of a foot squared. If the length of the shape is $\frac{3}{4}$ of a foot, then how wide is the rectangle?