1. What is the value of the expression below?

$$8\frac{4}{9} \div 4\frac{2}{3}$$

A. $1\frac{17}{21}$

C. $32\frac{8}{27}$

B. $2\frac{2}{3}$

D. $39\frac{11}{27}$

2. Which integer is closest to the value of the expression below?
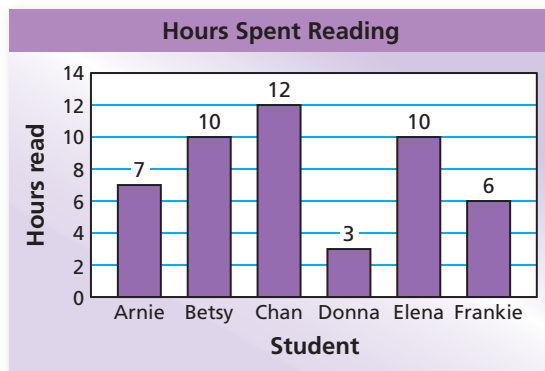
$$4.18 + 6.225 + 5.7$$

F. 18

H. 16

G. 17

I. 15

Test-Taking Strategy

Solve Problem Before Looking at Choices

At a speed of 20 miles per hour, how far can a hyena run in 15 minutes?

Ⓐ 20 mi   Ⓑ 5 mi   Ⓒ 80 mi   Ⓓ 10 mi

Toward me or away from me?

"Solve the problem before looking at the choices. You know one-fourth of 20 is 5, so the answer is 5 miles."

3. The data set in the box below has no mode. One number is missing.

18, 24, 22, 30, 26, _____, 25

The mean of the set of data has the same value as the median of the set of data. What is the missing number?

4. The number of hours each of 6 students spent reading last week is shown in the bar graph below.

Hours Spent Reading

Student	Hours read
Arnie	7
Betsy	10
Chan	12
Donna	3
Elena	10
Frankie	6

For the data in the bar graph, which measure is the *least*?

**A.** mean

C. mode

B. median

D. range

5. You go to a beach and collect buckets of shells. Of the many shells you have collected, you notice the following.

- 9% of the seashells were auger shells.

- $\frac{1}{8}$ of the seashells were coquina shells.

- 11% of the seashells were rough scallop shells.

- 0.1 of the seashells were fighting conch shells.

Which list correctly shows the types of shells in order from least to greatest?

F. auger, coquina, rough scallop, fighting conch

G. fighting conch, coquina, auger, rough scallop

H. fighting conch, auger, rough scallop, coquina

I. auger, fighting conch, rough scallop, coquina

6. What is the median of the data shown in the line plot below?
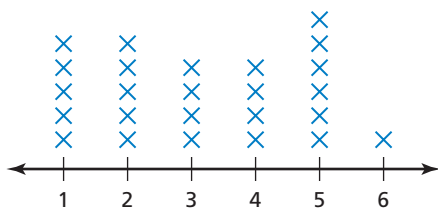
A. 3

B. 3.5

C. 4.2

D. 5

7. A service club wants to buy tickets to a baseball game. Tickets are available for the grandstand and for the bleachers.

Grandstand Ticket $25	Bleachers Ticket $15

Which expression represents the total cost, in dollars, for g grandstand tickets and b bleachers tickets?

F. $375(g + b)$

G. $40(g \times b)$

H. $25g + 15b$

I. $25g \times 15b$

8. What is the value of the expression below?

$$46.8 \div 0.12$$

9. What is the value of the expression below when $a = 6$ and $b = 14$?

$$0.8a + 0.02b$$

   A. 0.4828   **C.** 5.08

   B. 0.8814   **D.** 16.4

10. Which property was *not* used in the box below to simplify the expression?

$$0.3 \times 53 + 53 \times 0.7 = 53 \times 0.3 + 53 \times 0.7$$
$$= 53 \times (0.3 + 0.7)$$
$$= 53 \times 1$$
$$= 53$$

   F. Distributive Property

   G. Associative Property of Addition

   H. Identity Property of Multiplication

   I. Commutative Property of Multiplication

11. Determine a data set of 5 numbers that has the following measures:

- a mean of 7
- a median of 9

Explain how you determined your data set, and demonstrate that the mean of your data set is 7 and the median is 9.

12. Which integer is closest to the value of the expression below?

$$24.8\% \text{ of } 408$$

   A. 16   **C.** 1,600

   B. 100   **D.** 10,000