

TEST PREP

Directions: Read the question or statement carefully. Then, choose the best response (circle the letter).

- 1 What is the value of the 2 in 18,205,694?
A 20,000,000
B 2,000,000
C 200,000
D 20,000
- 2 Round 62,971 to the nearest thousand.
F 60,000
G 62,000
H 62,900
J 63,000
- 3 In what place is the 6 in 163,924,107?
A hundred millions
B millions
C ten millions
D ten thousands
- 4 What is 9,012,000 in word form?
F nine million twelve
G nine million, twelve thousand
H ninety million, twelve
J ninety million, twelve thousand
- 5 Write one million, two-hundred fifty-six thousand, ten in standard form.
A 1,256,010
B 1,256,100
C 100,256,010
D 100,256,100
- 6 Find the $|-17|$.
F -17
G 71
H 17
J -71
- 7 Which is not a rational number?
A 4
B $\frac{1}{2}$
C 3.1415926535...
D $0.\bar{3}$
- 8 Which shows the decimal for $\frac{8}{33}$?
F 0.24
G $2.\bar{4}$
H 2.4
J $0.\bar{24}$
- 9 Which set of fractions is in order from least to greatest?
A $\frac{3}{4}, \frac{2}{3}, \frac{5}{7}$
B $\frac{4}{7}, \frac{1}{2}, \frac{3}{5}$
C $\frac{1}{2}, \frac{7}{8}, \frac{3}{4}$
D $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$
- 10 What is the $|30|$?
F -30
G -3
H 30
J 3

TEST PREP

1 Which ratio is equal to $\frac{45}{72}$?

- A $\frac{8}{3}$
- B $\frac{5}{8}$
- C $\frac{16}{6}$
- D $\frac{3}{7}$

2 Which is a rate?

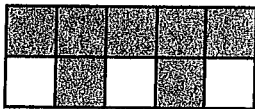
F $\frac{\$1.00}{\$10.00}$

G $\frac{12}{24}$

H $\frac{12 \text{ tokens}}{\$10.00}$

J $\frac{2 \text{ tokens}}{14 \text{ tokens}}$

3 What percent of the figure is shaded?



- A 30%
- B 7%
- C 3%
- D 70%

4 Which of the following shows a true proportion?

F $\frac{4}{3} = \frac{12}{16}$

G $\frac{5}{7} = \frac{10}{15}$

H $\frac{22}{6} = \frac{11}{2}$

J $\frac{18}{12} = \frac{3}{2}$

5 Find 65% of 80

- A 5200
- B 5.2
- C 52
- D 520

6 Two quarts of water weighs about 4 pounds. About how much does 4 quarts of water weigh?

- F 1 lb
- G 4 lbs
- H 6 lbs
- J 8 lbs

7 Write 0.386 as a percent.

- A 38.6%
- B 386%
- C 3.86%
- D 0.00386%

8 Solve: $\frac{6}{8} = \frac{x}{160}$

- F 20
- G 60
- H 120
- J 960

9 Write $\frac{12}{25}$ as a percent.

- A 48%
- B 48
- C 0.48%
- D 12%

10 Write 72% as a fraction in simplest form.

F $\frac{72}{100}$

G $\frac{18}{25}$

H $\frac{36}{50}$

J 18%

16 Solve the following proportion by cross multiplying.

Show your work.

$$\frac{20}{8} = \frac{n}{2}$$

Answer: _____

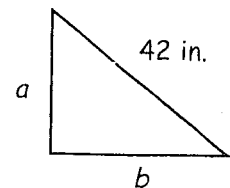
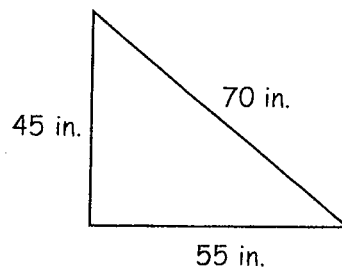
17 Molly bought a DVD that was priced at \$19.99. She had to pay 8.25% sales tax. How much sales tax did she have to pay?

Show your work.

Answer: _____

18 The lengths of the sides of a triangle are 45 inches, 55 inches, and 70 inches. The longest side of a similar triangle is 42 inches. What are the lengths of the other two sides of the similar triangle? [not drawn to scale]

Show your work.



Answer a: _____

Answer b: _____

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11 Which of the following numbers are larger than $\frac{5}{8}$ and smaller than 0.98?

Part A

Circle all that apply.

0.75

$\frac{3}{5}$

0.63

$\frac{8}{5}$

Part B

Explain in words why you circled those numbers.

12 Given the following four numbers:

9

2.36908...

$\frac{2}{3}$

0. $\overline{214}$

Part A

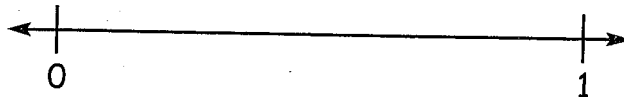
List all the numbers that are rational.

Part B

Explain how you arrived at your answer.

13 Place a dot on the number line to show the approximate position of each fraction. Label each dot with its number.

$\frac{1}{7}, \frac{2}{5}, \frac{1}{4}, \frac{2}{3}, \frac{9}{10}$



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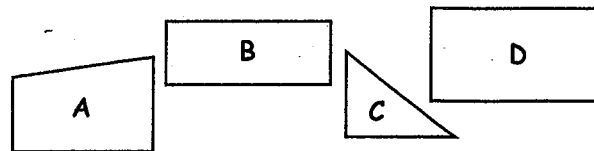
H $\frac{36}{50}$

J 18%

11 Which does not show the ratio 2 apples to 3 oranges?

- A $\frac{2}{3}$
- B 2 to 3
- C 2:3
- D $\frac{3}{2}$

12 Which figures appear to be similar?



- F A and D
- G B and C
- H A and C
- J B and D

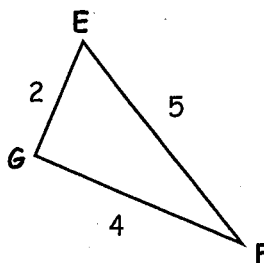
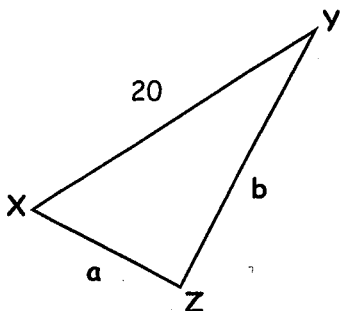
13 Adam sells computer hardware. He earns 27% of his total sales in commission. If he earned \$900 in commissions last month, what were his total sales for the month? Show your work.

Answer: _____

14 The middle school math classes were collecting cans for the local food drive. Their goal was 1,000 cans. So far, 550 cans have been collected. What percent is this of the goal? Show your work.

Answer: _____

15 Find the missing sides of the triangles below. $\triangle XYZ \sim \triangle EFG$. [not drawn to scale] Show your work.



a _____
b _____

16 Solve the following proportion by cross multiplying.

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$$\frac{20}{8} = \frac{n}{2}$$

Answer: _____

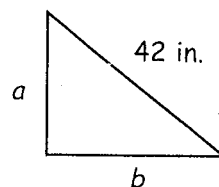
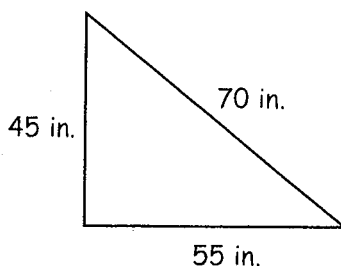
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