

Proportionality Test

Form A



| Name | |
|----------|--|
| | |
| Grade | |
| Date | |
| School _ | |
| Teacher | |



Demonstrate

Are the ratios proportional?

$$\frac{5}{6}$$
 and $\frac{8}{5}$

Yes

BNo

Find the missing value.

$$\frac{4}{5} = \frac{12}{x}$$

(A) 48

B 60

c 3

D 15





Practice

Are the ratios proportional?

$$\frac{6}{8}$$
 and $\frac{7}{10}$

(A) Yes

BNo

Are the ratios proportional?

$$\frac{5}{10}$$
 and $\frac{7}{14}$

A Yes B No

A store advertises 2 watermelons for \$6. How many watermelons for could I buy for \$15?

- A 30 watermelons
- **B** 5 watermelons
- © 6 watermelons
- Not shown



Which is a common denominator for the two ratios?

- (A) 18
- **B** 15
- (c) 50
- (D) 35

2

Which proportion matches the story?

It takes 72 chicken strips to feed 30 kids. Therefore, it takes 48 chicken strips to feed 20 kids.

- kids
- B strips

3

Allan's watch is broken and loses 5 minutes every 4 hours. How many minutes will it lose in 1 day (24 hours)?

- (A) 120 minutes
- (B) 30 minutes
- © 19.2 minutes
- 96 minutes

4

Which proportion matches the story?

Megan makes \$32 for working 4 hours. This means she makes \$8 per hour.

- $\begin{array}{c|c}
 \hline
 c & \frac{\text{hours}}{\text{dollars}} & \frac{32}{4} = \frac{1}{8}
 \end{array}$ $\begin{array}{c|c}
 \hline
 c & \frac{\text{dollars}}{32} = \frac{\text{hours}}{1}$

5

Are the ratios proportional?

 $\frac{3}{7}$ and $\frac{4}{12}$

- Yes
- (B) No

6

Which is a common denominator for the two ratios?

$$\frac{4}{8}$$
 $\frac{5}{10}$

- (A) 80
- (B) 48
- (c) 50
- (D) 32



7

On the map, 1 inch is 50 miles.

Dove Creek and Holly are 5 inches apart on the map. What is the distance in miles?

- (A) 10 miles
- B 5 miles
- © 50 miles
- 250 miles

8

Find the missing value.

$$\frac{1}{6} = \frac{4}{x}$$

- (A) 24
- **B** 11
- © 18
- **D** 9

9

Which proportion matches the story?

Mische can read 40 pages in 50 minutes.

If she reads at a constant rate, it means that in 80 minutes, she can read 64 pages.

- $\frac{\text{minutes}}{\text{pages}} \quad \frac{50}{40} = \frac{80}{64}$
- $\frac{\text{pages}}{\text{minutes}} \quad \frac{80}{64} = \frac{40}{50}$

10

Are the ratios proportional?

$$\frac{4}{5}$$
 and $\frac{2}{3}$

- (A) Yes
- [®]No

1

Find the missing value.

$$\frac{2}{6} = \frac{x}{9}$$

- A 54
- **B** 3
- © 18
- **D** 12

12

A pond has 3 plants for every 2 fish. If there are 33 plants in the pond, how many fish are are in the pond?

- (A) 22 fish
- B 6 fish
- © 11 fish
- 22 plants



13

Which proportion could be used to solve the problem?

It takes a teacher 45 minutes to grade papers for 15 students. How many minutes will it take for the teacher to grade papers for 26 students?

 $\frac{\text{minutes}}{\text{students}} \quad \frac{x}{15} = \frac{26}{45}$

 $\frac{\text{minutes students}}{\frac{45}{x}} = \frac{15}{26}$

 $\frac{\text{minutes}}{\text{students}} = \frac{15}{45} = \frac{x}{26}$

 $\frac{\text{minutes students}}{25} = \frac{26}{15}$

14

Which proportion could be used to solve the problem?

Oscar makes terrific tacos. To make 8 tacos, he uses 1 pound of beef. His family is coming over and he needs to make 40 tacos. How many pounds of beef will Oscar need?

pounds tacos $\frac{1}{y} = \frac{40}{8}$

 $\frac{\text{c}}{\text{pounds}} \frac{\text{tacos}}{1} = \frac{40}{\text{x}}$

 $\frac{\text{tacos pound}}{8} = \frac{1}{x}$

15

A store advertises 32 avocadoes for \$16. How many avocadoes can you buy for \$4?

(A) 128 avocados

B 8 avocados

© 64 avocados

4 avocados

16

Are the ratios proportional?

 $\frac{6}{8}$ and $\frac{5}{10}$

A Yes B No

17

Are the ratios proportional?

 $\frac{12}{30}$ and $\frac{2}{5}$

(A) Yes

■ No

18

Find the missing value.

$$\frac{3}{x} = \frac{12}{32}$$

<u>A</u> 8

B 4

© 36

D 96



19

Find the missing value.

$$\frac{x}{8} = \frac{3}{12}$$

- (A) 24
- **B** 4

- **c** 2
- **D** 96

20

Find the missing value.

$$\frac{x}{9} = \frac{4}{12}$$

- <u>A</u> 36
- B 27

- **c** 3
- **D** 48

21

In a class of 30 high school students, 21 students drive a car to school. What percent of students drive a car to school?

- 21% \bigcirc A
- B 7%
- (c) 70%
- D 30%

22

Assuming the figures are similar, find the missing value.

12



- 180 (A)
- 20 (B)
- (c) 12
- (D) 3

23

Is the relationship shown in the graph proportional?

- (A) Yes
- B No