MSTAR INTERVENTION

Proportionality Test

Form B

Name _____

Grade _____

Date _____

School _____

Teacher _____

Demonstrate

Are the ratios proportional?

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

(A) Yes (B) No

Find the missing value.

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

(A) 48 (B) 60

(C) 3 (D) 15

STOP

Practice

Are the ratios proportional?

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

(A) Yes (B) No

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

(C) 6 watermelons (D) Not shown

STOP

1

Are the ratios proportional?

$\frac{4}{6}$ and $\frac{8}{12}$

(A) Yes (B) No

2

Find the missing value.

$\frac{4}{5} = \frac{16}{x}$

(A) 4 (B) 80

(C) 20 (D) 64

3

Are the ratios proportional?

$\frac{3}{4}$ and $\frac{12}{24}$

(A) Yes (B) No

4

Find the missing value.

$\frac{4}{10} = \frac{x}{15}$

(A) 5 (B) 6

(C) 60 (D) 4.5

5

Which is a common denominator for the two ratios?

$\frac{4}{6}$ $\frac{6}{9}$

(A) 54 (B) 24

(C) 48 (D) 36

6

Emily is selling candy bars for a fundraiser. Her goal is to earn $48. At $6 per 4 candy bars, how many will she have to sell to reach her goal?

(A) 32 candy bars (B) 288 candy bars

(C) 24 candy bars (D) 192 candy bars

7

Find the missing value.

$$\frac{3}{9} = \frac{x}{30}$$

(A) 90 (B) 10

(C) 9x (D) Not shown

8

Which proportion matches the story?

Travis' car gets 27 miles per gallon. His gas tank holds 11 gallons, so under ideal driving conditions and constant speed, it means he can drive 297 miles on one tank of gas.

(A) $\frac{\text{gallons}}{1} = \frac{\text{miles}}{297}$ (B) $\frac{\text{miles}}{\text{gallons}} \quad \frac{297}{1} = \frac{11}{27}$

(C) $\frac{\text{miles}}{\text{gallons}} \quad \frac{1}{27} = \frac{11}{297}$ (D) $\frac{\text{gallons}}{\text{miles}} \quad \frac{1}{27} = \frac{11}{297}$

9

Are the ratios proportional?

$$\frac{8}{9} \text{ and } \frac{2}{3}$$

(A) Yes (B) No

10

It takes Mr. Peter 35 minutes to grade 10 students' papers. How long would it take him to grade 4 students' papers?

(A) 140 minutes (B) 87.5 minutes

(C) 40 minutes (D) 14 minutes

11

Are the ratios proportional?

$$\frac{6}{15} \text{ and } \frac{4}{10}$$

(A) Yes (B) No

12

Which proportion could be used to solve the problem?

A company found that for every 100 parts, 2 are defective. With this information, how many parts should be expected to have a defect in a batch of 350 parts?

(A) $\frac{\text{defect}}{\text{total}} \quad \frac{x}{100} = \frac{350}{2}$ (B) $\frac{\text{defect}}{350} \quad \frac{x}{\text{total}} = \frac{100}{2}$

(C) $\frac{\text{total}}{100} \quad \frac{350}{\text{defect}} = \frac{2}{x}$ (D) $\frac{\text{total}}{\text{defect}} \quad \frac{100}{2} = \frac{350}{x}$

13

While cleaning his closet, Rich discovered he had 8 shirts for every 5 pairs of pants. If Rich has 40 shirts, how many pairs of pants does Rich have?

(A) 25 pairs
(B) 40 pairs
(C) 200 pairs
(D) Not shown

14

Which proportion could be used to solve the problem?

A town in Iowa received 13 inches of snow in 14 hours. If the rate of snowfall was constant, how many inches of snow fell per hour?

(A) $\frac{\text{hours}}{14} = \frac{\text{inches}}{13}$ $\frac{1}{x}$
(B) $\frac{\text{hours}}{14} = \frac{\text{inches}}{x}$ $\frac{1}{13}$
(C) $\frac{\text{hours}}{\text{inches}}$ $\frac{1}{13} = \frac{x}{14}$
(D) $\frac{\text{inches}}{\text{hours}}$ $\frac{x}{1} = \frac{14}{13}$

15

Are the ratios proportional?

$\frac{3}{6}$ and $\frac{4}{8}$

(A) Yes
(B) No

16

Find the missing value.

$\frac{x}{6} = \frac{3}{18}$

(A) 36
(B) 1
(C) 18
(D) 108

17

A recipe for sesame chicken calls for 1 pound of chicken for four servings. For the party, I need to make 28 servings. How many pounds of chicken do I need to make enough sesame chicken?

(A) 28 pounds
(B) 7 pounds
(C) 112 pounds
(D) Not shown

18

Are the ratios proportional?

$\frac{12}{16}$ and $\frac{3}{4}$

(A) Yes
(B) No

19

Find the missing value.

$$\frac{x}{15} = \frac{3}{9}$$

(A) 45 (B) 5

(C) 135 (D) Not shown

20

Find the missing value.

$$\frac{x}{5} = \frac{12}{30}$$

(A) 60 (B) 30

(C) 6 (D) 2

21

Patricia's favorite store is advertising 40% off everything. She found a pair of jeans for $90. How much can Patricia expect to save with the 40% off sale?

(A) $36 (B) $22.50

(C) $13 (D) $54

22

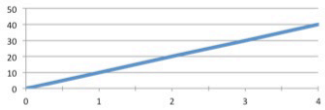
Assuming the figures are similar, find the missing value.

(A) 20 (B) 324

(C) 9 (D) 36

23

Is the relationship shown in the graph proportional?



(A) Yes (B) No

STOP