

Name: _____

Date: _____

Scale and proportional relationships

Solve each problem. Show your work.

1. A model car is built at a scale of 1 : 10. The model is 48 cm long. How long is the real car in centimeters?

Answer: _____

2. y is proportional to x . When $x = 4$, $y = 20$. What is y when $x = 7$?

Answer: _____

3. In a table of a proportional relationship, $x = 4$ and $y = 20$. What is the constant of proportionality?

Answer: _____

4. On a map, 1 cm stands for 20 km. Two towns are 10 cm apart on the map. How far apart are they in real life?

Answer: _____

5. A model car is built at a scale of 1 : 12. The model is 29 cm long. How long is the real car in centimeters?

Answer: _____

6. y is proportional to x . When $x = 2$, $y = 16$. What is y when $x = 5$?

Answer: _____

7. In a table of a proportional relationship, $x = 7$ and $y = 63$. What is the constant of proportionality?

Answer: _____

8. On a map, 1 cm stands for 10 km. Two towns are 7 cm apart on the map. How far apart are they in real life?

Answer: _____

9. A model car is built at a scale of 1 : 24. The model is 16 cm long. How long is the real car in centimeters?

Answer: _____

10. y is proportional to x . When $x = 4$, $y = 28$. What is y when $x = 9$?

Answer: _____

Ratios and Proportions: Answer Key

1. 480 cm

2. 35

3. 5

4. 200 km

5. 348 cm

6. 40

7. 9

8. 70 km

9. 384 cm

10. 63