

Multiplicative Comparison

Number & Operations · Grade 4

Score: _____ / 12

◆ Medium · 12 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

- Class A has 28 students. Class A has 4 times as many as Class B.
How many students are in Class B?

Answer: _____

- A rope is 36 m long. It is 9 times as long as a stick.
How long is the stick?

Answer: _____

3. Kim saved \$48. She saved 6 times as much as her sister.

How much did her sister save?

How much more did Kim save than her sister?

Answer: _____

4. A factory produces 240 items per day.

It produces 8 times as many as a small workshop.

How many does the workshop produce daily?

Answer: _____

5. A pond has 54 fish. There are 5 times as many minnows as trout.

How many trout and how many minnows are in the pond?

Answer: _____

6. A blue car drove 180 km.
It drove 3 times as far as a red car.
How far did the red car drive?
How far did both drive combined?

Answer: _____

7. A number is 7 times another number.
Their sum is 56. What are the two numbers?

Answer: _____

8. Marcus has 5 times as many cards as Priya.
Together they have 72 cards.
How many does each have?

Answer: _____

9. A jug holds 3 times as much as a cup.

A barrel holds 4 times as much as the jug.

If the cup holds 2 litres, how much does the barrel hold?

Answer: _____

10. A school has 6 times as many students as teachers.

There are 35 teachers.

How many students are there?

How many people in total?

Answer: _____

- 11.** A piece of wood is 48 cm.
It is cut so one piece is 3 times longer than the other.
What are the lengths?

Answer: _____

- 12.** There are 4 times as many red marbles as blue ones.
If there are 60 marbles in all, how many are blue?

Answer: _____

Answer Key

Multiplicative Comparison — Medium

1. 7 students

$\text{Class B} = 28 \div 4 = 7 \text{ students.}$

2. 4 m

$\text{Stick} = 36 \div 9 = 4 \text{ m.}$

3. Sister saved \$8. Kim saved \$40 more.

$\text{Sister} = 48 \div 6 = \$8. \text{ Difference} = 48 - 8 = \40 more.

4. 30 items

$\text{Workshop} = 240 \div 8 = 30 \text{ items.}$

5. 9 trout and 45 minnows.

$\text{Let trout} = t. \text{ Minnows} = 5t. \text{ Total: } t + 5t = 6t = 54. t = 9 \text{ trout. Minnows} = 5 \times 9 = 45. \text{ Check: } 9 + 45 = 54 \checkmark.$

6. Red car: 60 km. Combined: $180 + 60 = 240$ km.

$\text{Red} = 180 \div 3 = 60 \text{ km. Total} = 180 + 60 = 240 \text{ km.}$

7. 7 and 49

$\text{Let small} = n. \text{ Large} = 7n. n + 7n = 8n = 56. n = 7. \text{ Large} = 49.$

8. Priya: 12 cards. Marcus: 60 cards.

$\text{Let Priya} = p. \text{ Marcus} = 5p. p + 5p = 6p = 72. p = 12. \text{ Marcus} = 60.$

9. 24 litres

$\text{Jug} = 2 \times 3 = 6 \text{ L. Barrel} = 6 \times 4 = 24 \text{ L.}$

10. Students: 210. Total: 245.

$\text{Students} = 35 \times 6 = 210. \text{ Total} = 35 + 210 = 245.$

11. 12 cm and 36 cm

Short + 3×short = 4×short = 48. Short = 12. Long = 36.

12. 12 blue marbles

Blue + 4×blue = 5×blue = 60. Blue = 12.
