Ratio tables

6 questions | 15 marks

Equivalent correct methods earn the corresponding marks.

1. Two identical bottles hold 3 L altogether. How much do 6 hold? [2 marks]

Multiply both bottle count and total volume by 3.

Answer: 9 L.

2. Five identical rulers cost 15 dollars. Find the costs of 1 ruler and 8 rulers. [2 marks]

One costs $\frac{15}{5}=3$ dollars.

Eight cost $8(3)=24$ dollars.

Answer: 3 dollars and 24 dollars.

3. For red:blue $3:4$, complete $(3,4)$, $(6,\square)$, $(\square,20)$. [2 marks]

Double the known pair for $(6,8)$.

Multiply by 5 for $(15,20)$.

Answer: 8 and 15.

4. A map uses 1 cm for 5 km. Find the distances for 3 cm, 7 cm and 10 cm. [3 marks]

Multiply each map length by 5 km per centimetre.

Answer: 15 km, 35 km and 50 km.

5. Hours and pay are $(1,18)$, $(2,36)$, $(3,54)$ and $(4,70)$. Which entry breaks a fixed hourly-rate model? [3 marks]

The first three pairs give 18 dollars per hour.

Four hours should give $4(18)=72$ dollars.

Answer: 70 dollars for 4 hours; the matching pay is 72 dollars.

6. Two equal rows have 8 seats. Find seats in 3, 5 and 7 such rows. [3 marks]

One row has $\frac{8}{2}=4$ seats.

Multiply 4 by 3, 5 and 7.

Answer: 12, 20 and 28 seats.