Ratio notation and part-to-part/whole meaning

6 questions | 14 marks

Equivalent correct methods earn the corresponding marks.

1. There are 5 red counters and 3 blue counters. Write red:blue. [2 marks]

Put red first and blue second.

Answer: $5:3$.

2. There are 8 apples and 2 pears. Write pears:apples. [2 marks]

Pears comes first: $2:8$.

Divide both entries by 2 for simplest form.

Answer: $2:8$, or $1:4$.

3. A class has 12 students who walk and 8 who cycle. Write walkers:all students. [2 marks]

There are $12+8=20$ students.

Write $12:20$ and divide both entries by 4.

Answer: $12:20$, or $3:5$.

4. In the counter picture, what fraction of the counters is yellow? [2 marks]



3 blue counters 2 yellow counters

There are 2 yellow counters out of 5 altogether.

Answer: $\frac{2}{5}$.

5. A short string is 30 cm and a long string is 1.2 m. Write short:long in simplest form. [3 marks]

Convert 1.2 m to 120 cm.

Simplify $30:120$ by dividing both entries by 30.

Answer: $1:4$.

6. Flour:sugar is $4:1$. Is sugar one-quarter or one-fifth of the combined flour and sugar? Explain. [3 marks]

There are $4+1=5$ parts altogether.

Sugar is one of those five parts.

Answer: One-fifth.