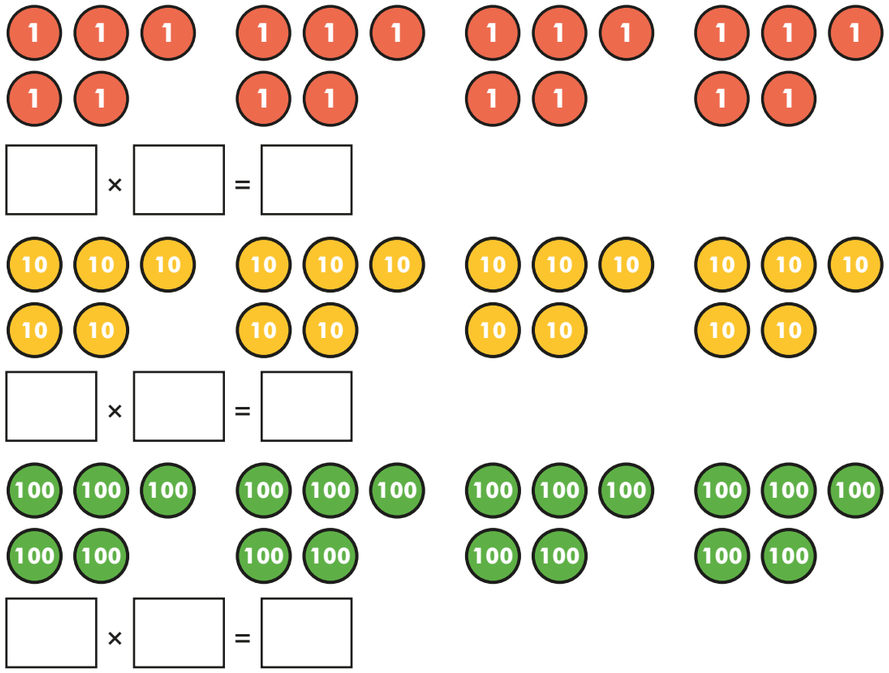
Reason from known facts

1 **a)** What multiplications are represented?



□ × □ = □

□ × □ = □

□ × □ = □

b) How do the representations in part a) show related facts?

c) Draw counters to show how to calculate 4 × 0.5

□ × □ = □

2 Complete the calculations.

a) 5 × 7 = □

50 × 7 = □

500 × 7 = □

b) 6 × 3 = □

6 × 300 = □

30 × 6 = □

c) 8 × 9 = □

72 ÷ 9 = □

720 ÷ 9 = □

720 ÷ 8 = □

d) 12 × 5 = □

600 ÷ 12 = □

6,000 ÷ □ = 12

300 ÷ 12 = □

3

85 × 5 = 425

Complete the calculations.

85 × 50 = □

85 × 500 = □

85 × 5,000 = □

425 ÷ 85 = □

425 ÷ 5 = □

4,250 ÷ 5 = □

4,250 ÷ 850 = □

4 The bar model shows 85 × 5 = 425

425				
85	85	85	85	85

Explain how to work out these calculations from the given fact.

85 × 6 = ☐

86 × 5 = ☐

5 Match the calculations that give the same answer.

4,251 – 1,750	2,502 + 1,749
5,251 – 1,750	2,500 + 1,750
4,249 – 1,750	5,250 – 1,749
2,501 + 1,750	4,250 – 1,749
2,501 + 1,749	4,250 – 1,751

Explain your method to a partner.

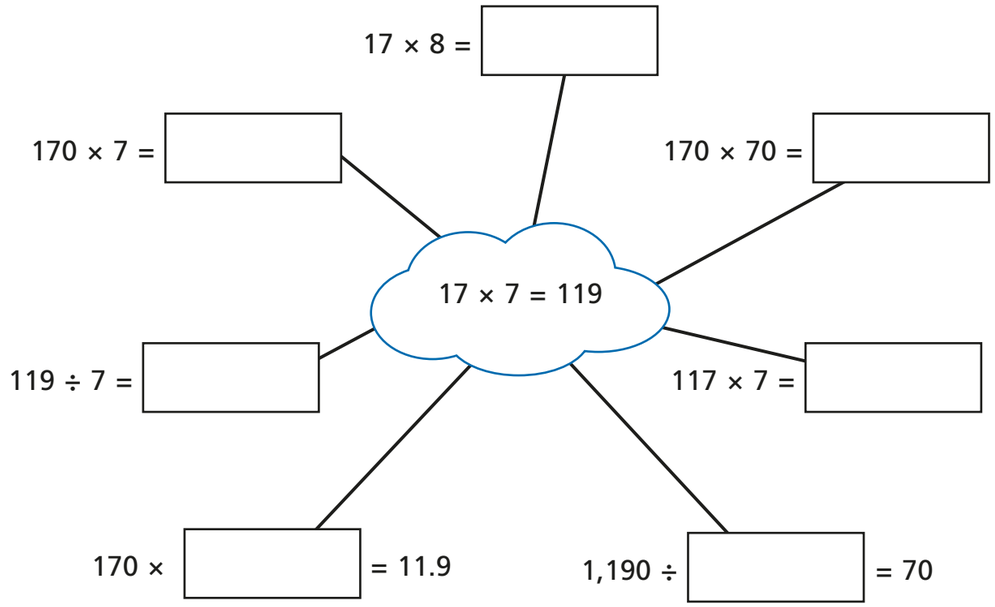
6 Eva has a 630 cm piece of ribbon.

She uses $\frac{4}{9}$ of the ribbon on a dress.

What length of ribbon does she use on the dress?

☐

7 Use the central calculation to complete the related facts.



8 Ron buys 8 cans for 99p each.

Annie buys 9 cans for 98p each.

What is the difference between the amounts they spend? ☐

What is the most efficient way of working this out?