

Idea 11: Fact teams (2)

Ask students to apply their knowledge of components in the key facts to work out calculations with larger numbers.

It is important that students explain their reasoning.

Fill in the missing numbers in the calculations below.

Ask students to make up their own examples.

Generalizing from Doubles

Key fact: $3 + 3 = 6$

Complete the following equations:

$$30 + 30 = \underline{\quad}$$

$$300 + \underline{\quad} = 600$$

$$23 + \underline{\quad} = 26$$

Generalizing from Bonds of 10

Key fact: $10 - 2 = 8$

$$100 - 20 = \underline{\quad}$$

$$1,000 - \underline{\quad} = 800$$

$$90 - \underline{\quad} = 88$$

Bridging through 10

Example: $26 + 7 = ?$

$$26 + 7 = 20 + 10 + 3 = 30 + 3 = 33$$

Complete the following showing all steps in the working.

$$75 + 8 =$$

$$134 + 27 =$$

Answers:

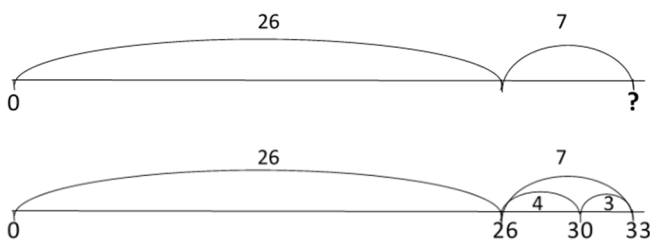
$$75 + 8 = 70 + 10 + 4 = 80 + 4 = 84$$

$$134 + 27 = 130 + 10 + 20 + 1 = 160 + 1 = 161$$

Calculation using a number line

Show the steps in the calculation on the number line and as equations.

Example: $26 + 7 = ?$



$$\begin{aligned} 26 + 7 &= ? \\ &= 26 + 4 + 3 \\ &= 30 + 3 \\ &= 33 \end{aligned}$$

Partitioning

Example: $57 + 32 = ?$

Use triads to partition both numbers, then show each step of the calculation.



$$\begin{aligned} 57 + 32 &= 50 + 7 + 30 + 2 \\ &= 80 + 9 \\ &= 89 \end{aligned}$$