

# Subtraction Strategies

(page 1 of 3)

In Grade 4, you are using different strategies to solve subtraction problems efficiently. Here is an example:

$$\begin{array}{r} 924 \\ - 672 \\ \hline \end{array}$$

## Subtracting in Parts

Amelia solved this problem by subtracting in parts.

### Amelia's solution

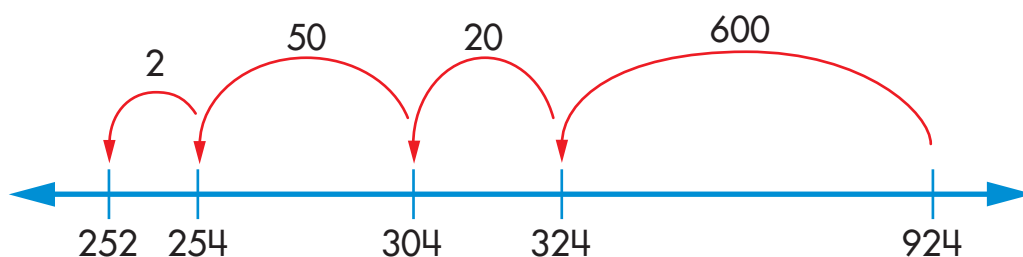
$$924 - 672 =$$

$$924 - 600 = 324$$

$$324 - 20 = 304$$

$$304 - 50 = 254$$

$$254 - 2 = \mathbf{252}$$



*I started at 924, and jumped back 672 in four parts (-600, -20, -50, -2).*

*I landed on 252.*

*The answer is the place where I landed.*

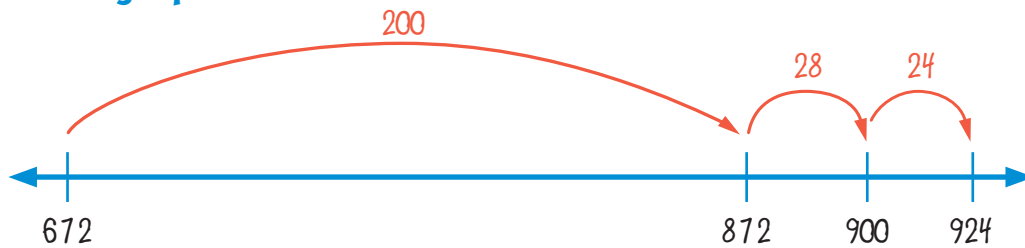
$$924 - 672 = \mathbf{252}$$

# Subtraction Strategies

(page 2 of 3)

$$\begin{array}{r} 924 \\ - 672 \\ \hline \end{array}$$

## Adding Up



Jake used an adding-up strategy to solve  $924 - 672$ .

### Jake's solution

$$672 + \underline{\quad ? \quad} = 924$$

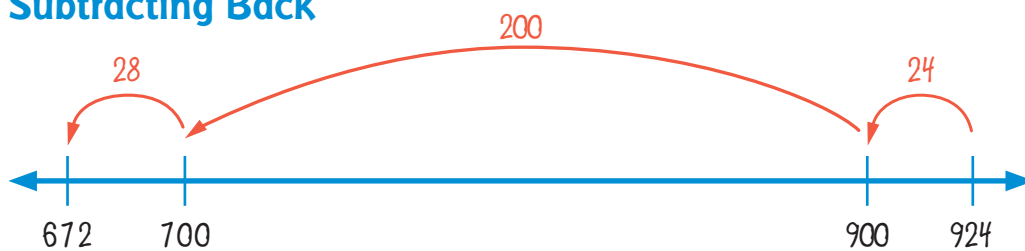
$$672 + \underline{200} = 872$$

$$872 + \underline{28} = 900$$

$$900 + \underline{24} = 924$$

$200 + 28 + 24 = \mathbf{252}$     *The answer is the total of all of the jumps from 672 up to 924.*

## Subtracting Back



Luke used a subtracting-back strategy.

### Luke's solution

$$924 - \underline{24} = 900$$

$$900 - \underline{200} = 700$$

$$700 - \underline{28} = 672$$

$24 + 200 + 28 = \mathbf{252}$     *The answer is the total of all the jumps from 924 back to 672.*

# Subtraction Strategies

(page 3 of 3)

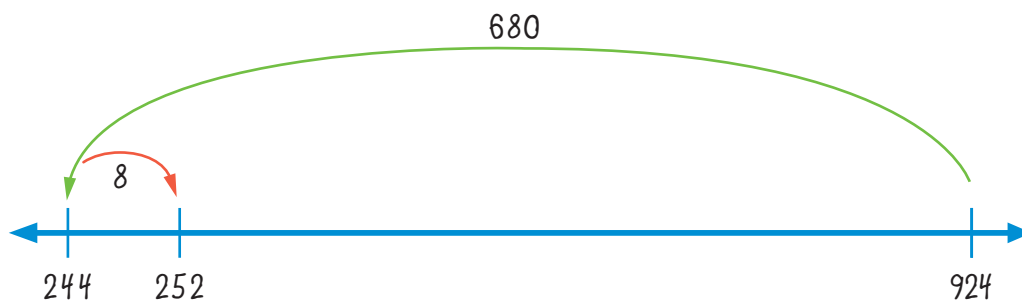
$$\begin{array}{r} 924 \\ - 672 \\ \hline \end{array}$$

## Changing the Numbers

Sabrina and Ursula solved  $924 - 672$  by changing the numbers to make an easier problem to solve.

### Sabrina's solution

Sabrina changed one number and then adjusted to find her answer.



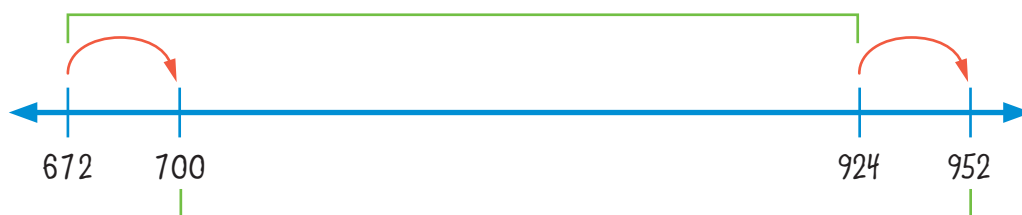
$$924 - 672 =$$

$$924 - 680 = 244 \quad \text{I subtracted 680 instead of 672.}$$

$$244 + 8 = \mathbf{252} \quad \text{I subtracted too much, so I have to add 8 back on.}$$

### Ursula's solution

Ursula solved this problem by creating an equivalent problem.



$$924 - 672 =$$

$$(+28) \quad (+28)$$

$$952 - 700 = \mathbf{252}$$



Show how you would solve the problem  $924 - 672$ .