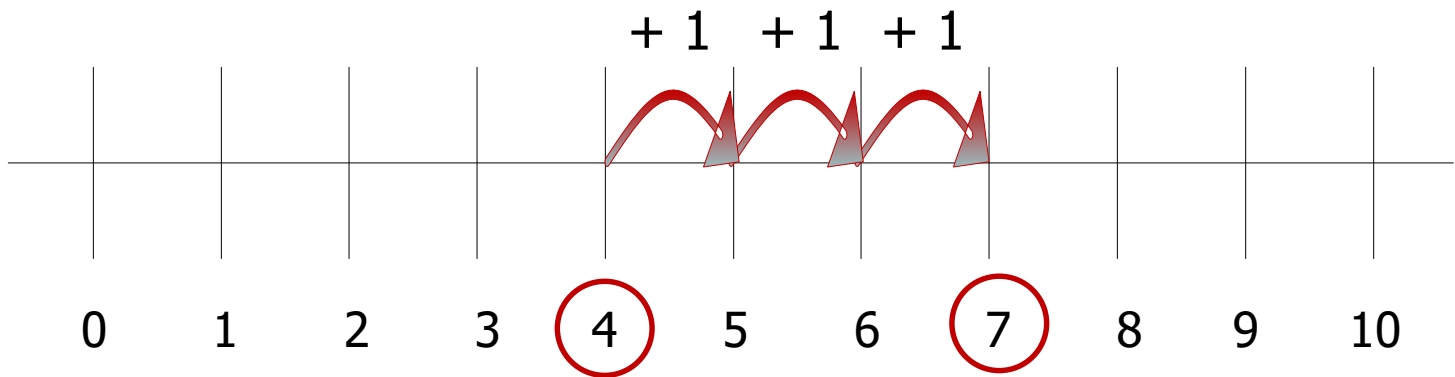


Pegasus Calculation Policy for addition

Year 1 addition

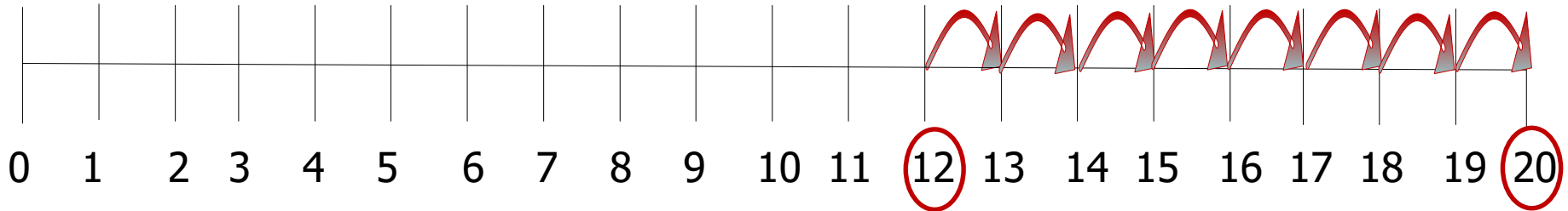
Number Lines: 0 + 0

$$4 + 3 = 7$$



Number Lines: T0 + 0

$$12 + 8 = 20$$

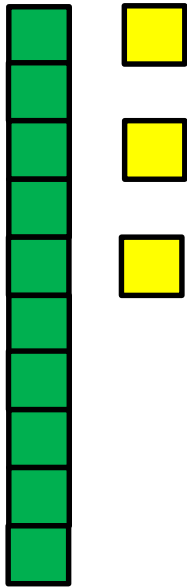


Year 2 addition

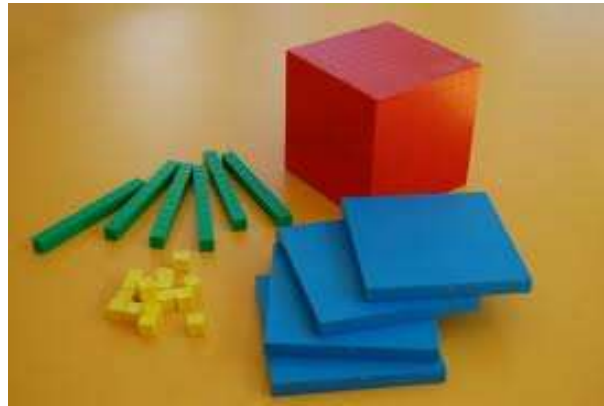
Partitioning

T U
1 3

Partition number into tens and units



$$= 10 + 3$$

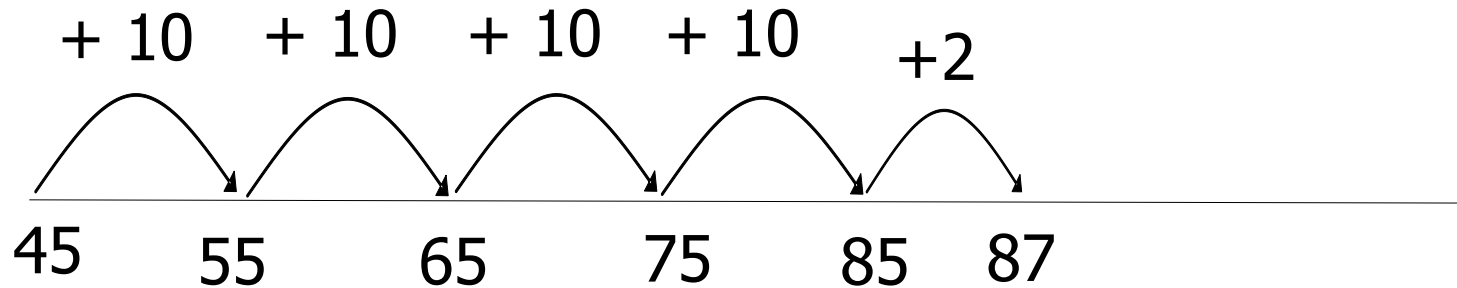


Supported with Dienes

Addition on a blank number line
using partitioning

TO + TO *no bridging*

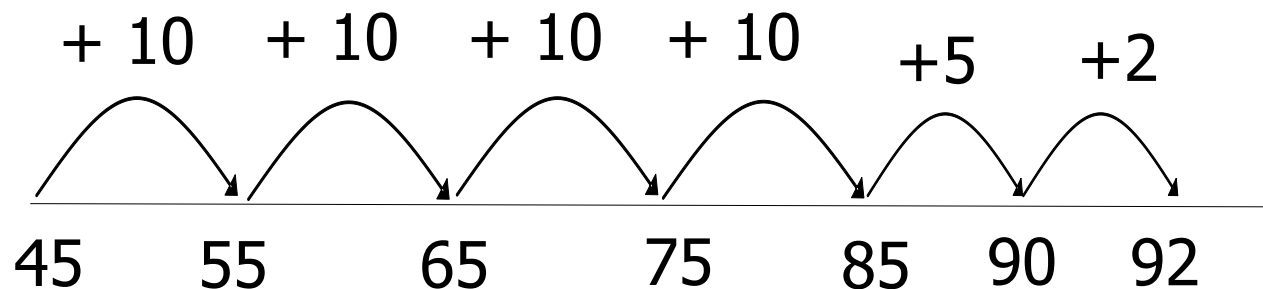
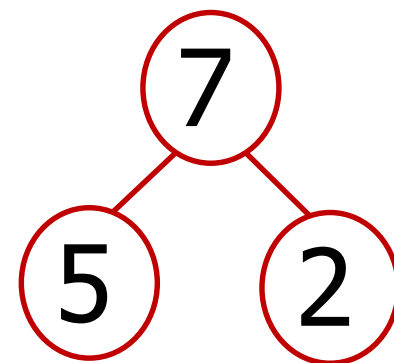
$$\begin{array}{ccc} \text{TO} & \text{TO} & \text{TO} \\ 45 & + & 42 = 87 \\ & \swarrow \quad \searrow & \\ & 40 \quad 2 & \end{array}$$



TO + TO *with bridging*

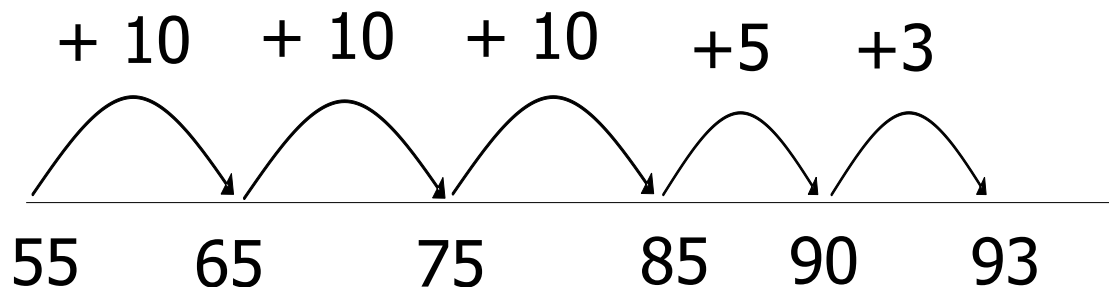
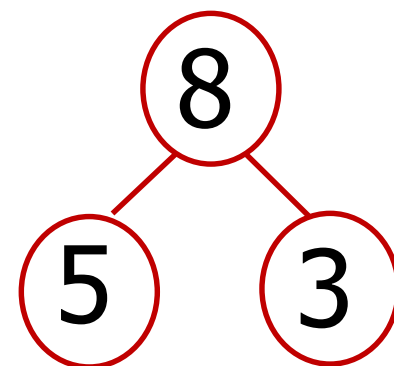
$$\begin{array}{ccc} \text{TO} & \text{TO} & \text{TO} \\ 45 & + & 47 = 92 \end{array}$$

40 7



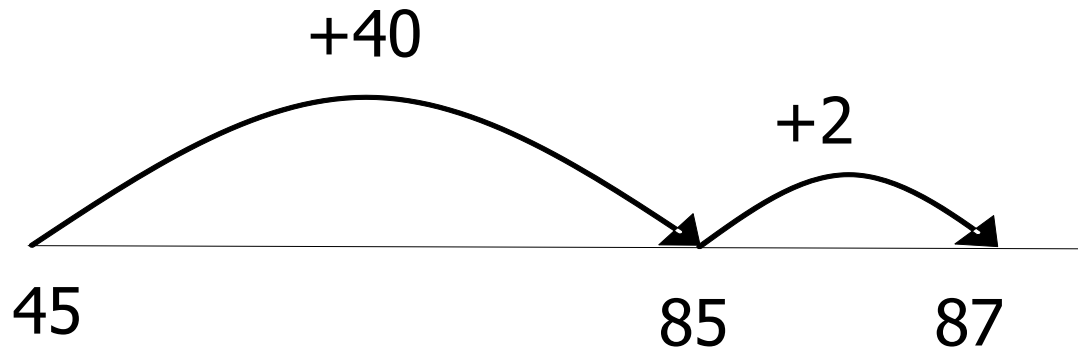
An opportunity to participate

$$\begin{array}{r} \text{TO} \quad \text{TO} \quad \text{TO} \\ 38 + 55 = 93 \\ \swarrow \quad \searrow \\ 30 \quad 8 \end{array}$$



TO + TO *in two steps*

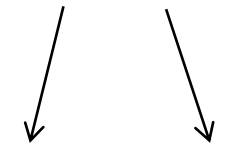
$$\begin{array}{ccc} \text{TO} & \text{TO} & \text{TO} \\ 45 + 42 = 87 \end{array}$$

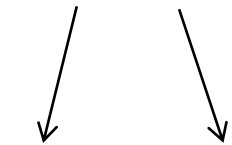


Partitioning and recombining

TO + TO *no bridging*

$$\begin{array}{cc} \text{T} & \text{O} \\ 4 & 3 \end{array} + \begin{array}{cc} \text{T} & \text{O} \\ 3 & 4 \end{array} = 77$$


 $\begin{array}{cc} \swarrow & \searrow \\ 40 & 3 \end{array}$


 $\begin{array}{cc} \swarrow & \searrow \\ 30 & 4 \end{array}$

$$= (40 + 30) + (3 + 4)$$

$$= 70 + 7$$

$$= 77$$

TO + TO *with bridging*

$$\begin{array}{cc} \text{T O} & \text{T O} \\ 59 & + 27 = 86 \\ \swarrow \searrow & \swarrow \searrow \\ 50 \quad 9 & 20 \quad 7 \end{array}$$

$$= (50 + 20) + (9 + 7)$$

$$= 70 + \begin{array}{c} 16 \\ \swarrow \searrow \\ 10 \quad 6 \end{array}$$

$$= (70 + 10) + 6$$

$$= 80 + 6$$

$$= 86$$

Opportunity to participate

$$\begin{array}{cc} \text{T O} & & \text{T O} \\ 48 & + & 36 = 84 \\ \swarrow \quad \searrow & & \swarrow \quad \searrow \\ 40 & 8 & 30 & 6 \end{array}$$

$$= (40 + 30) + (8 + 6)$$

$$= \begin{array}{cc} 70 & + & 14 \\ & & \swarrow \quad \searrow \\ & & 10 & 4 \end{array}$$

$$= (70 + 10) + 4$$

$$= 80 + 4$$

$$= 84$$

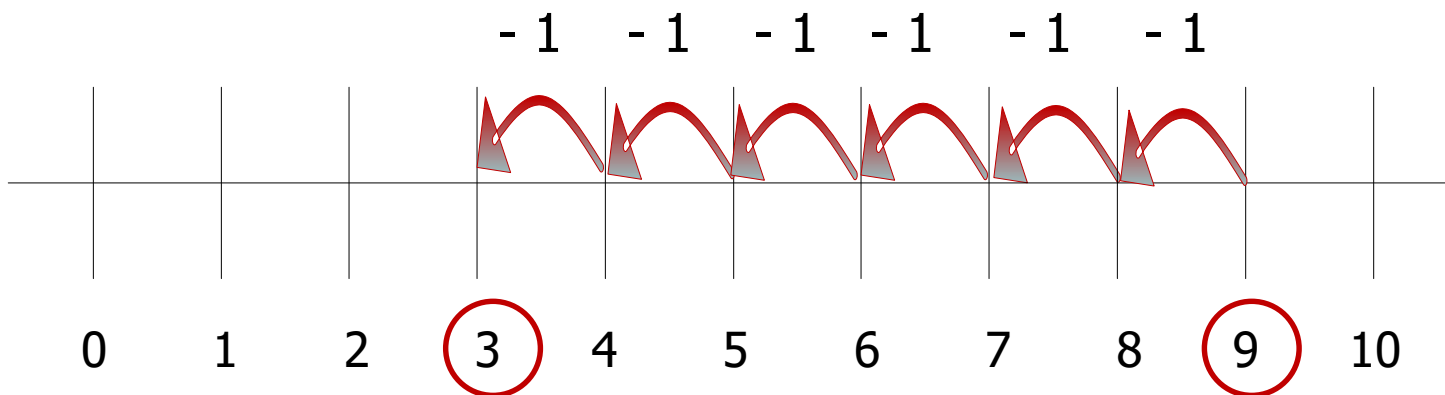
Pegasus Calculation Policy for subtraction

Year 1

Subtraction on a number line

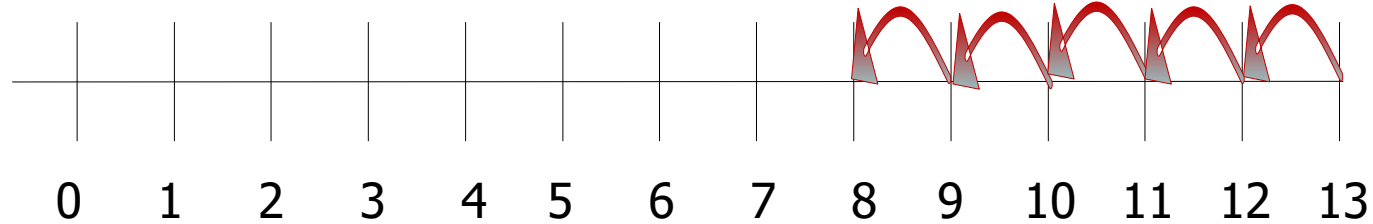
Subtraction on a number line 0 - 0

$$9 - 6 = 3$$



Subtraction on a number line TO - 0

$$13 - 5 = 8$$

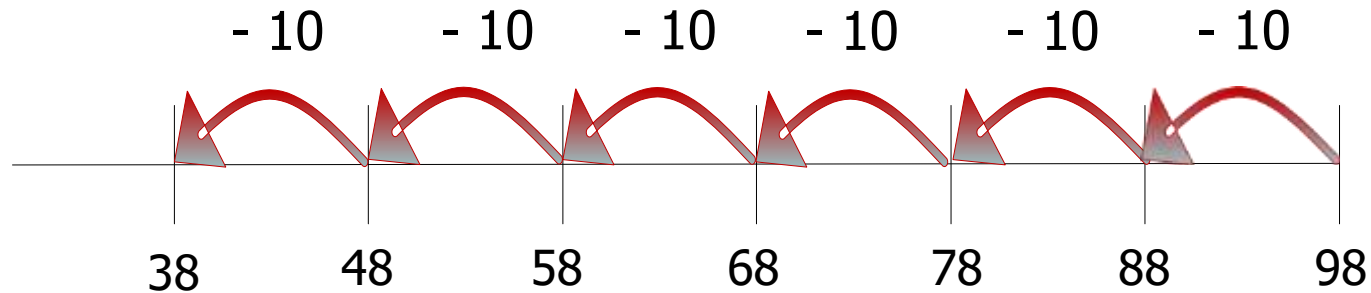


Year 2

Subtraction on a blank number line

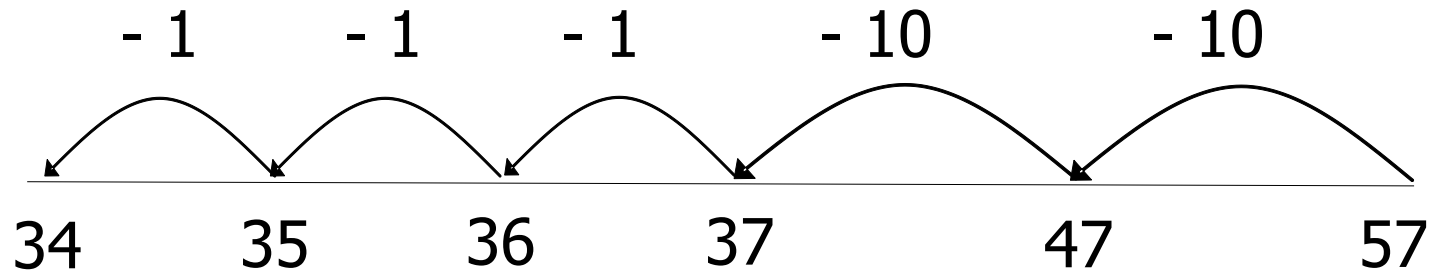
TO – TO multiples of ten

$$98 - 60 = 38$$



TO – TO *with partitioning*

$$\begin{array}{r} \text{T O} \quad \text{T O} \\ 57 - 23 = 34 \\ \swarrow \quad \searrow \\ 20 \quad 3 \end{array}$$

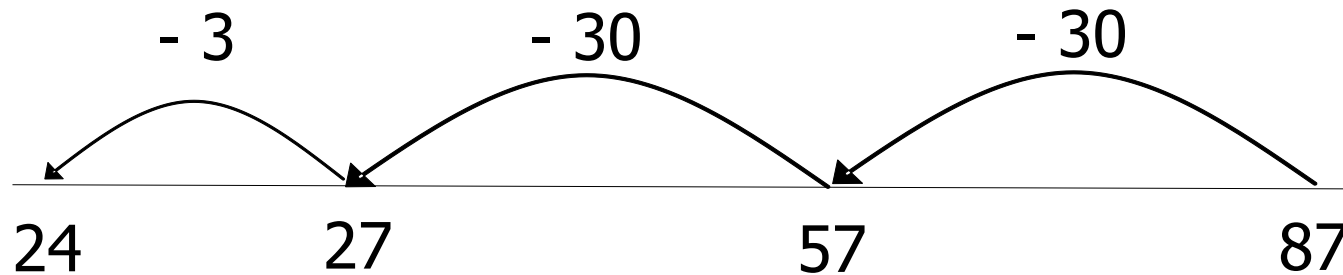


TO – TO *with partitioning*

$$\begin{array}{cc} \text{T O} & \text{T O} \\ 87 & - 63 = 24 \end{array}$$

60 3



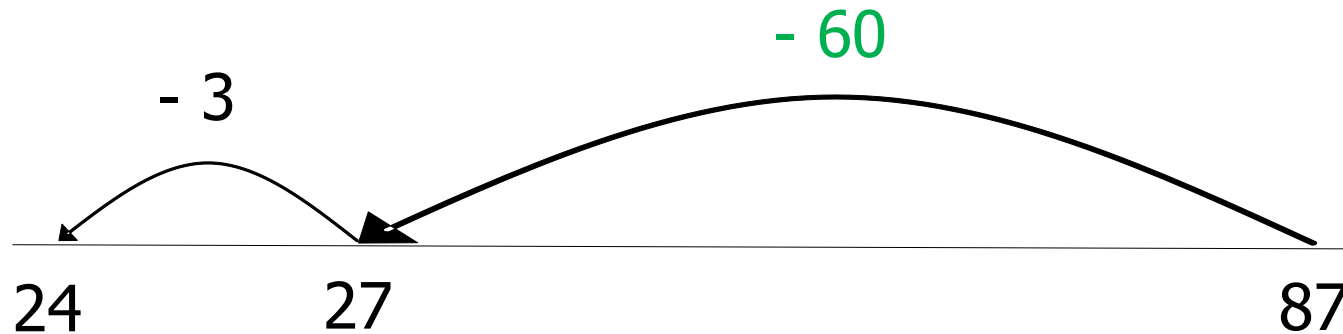


TO – TO *with partitioning*

$$\begin{array}{cc} \text{T O} & \text{T O} \\ 87 & - 63 = 24 \end{array}$$

Diagram showing the partitioning of 63 into 60 and 3:

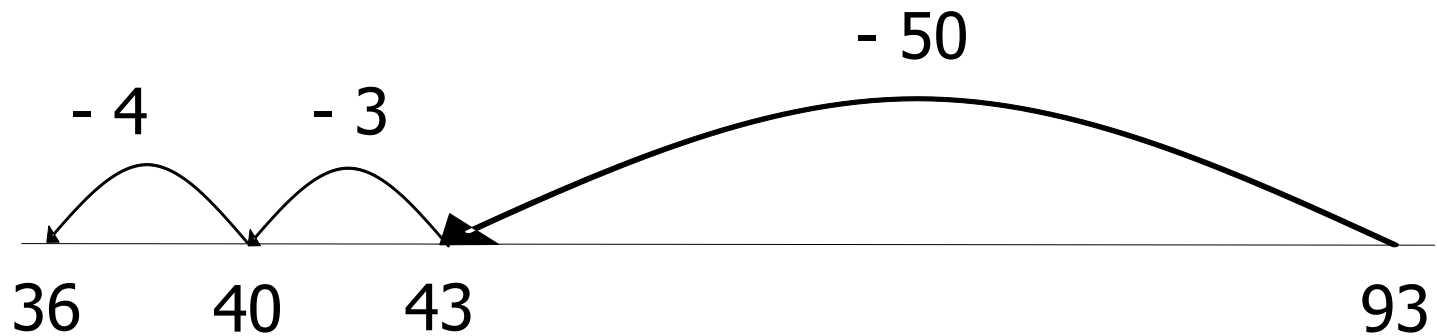
$$\begin{array}{cc} \swarrow & \searrow \\ 60 & 3 \end{array}$$



An opportunity to participate

$$\begin{array}{cc} \text{T O} & \text{T O} \\ 93 & - 57 = 36 \end{array}$$

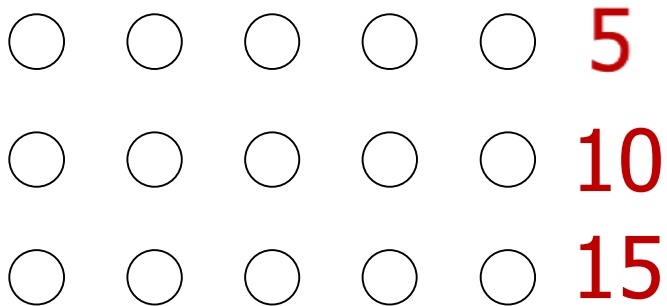
50 7
 ↙ ↘
 3 + 4



Pegasus Calculation Policy for multiplication

Arrays

$$3 \times 5 = 15$$



$$5 \times 3 = 15$$

