

# Multiplication Using distributive property

1

Break the larger number into two addends

$$15 \times 5$$

$$(\underline{10} + \underline{5}) \times 5$$

2

Multiply both addends by the other number

$$(\underline{10} \times \underline{5}) + (\underline{5} \times \underline{5})$$

3

Add the 2 products

$$\underline{10} + \underline{5} = \underline{75}$$

Use the distributive property of multiplication to find the product.

$$\begin{aligned} \textcircled{1} \quad & 12 \times 4 \\ & = (10 + 2) \times 4 \\ & = (10 \times \underline{\quad}) \times (2 \times 4) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 4 \times 14 \\ & = 4 \times (\underline{\quad} + 4) \\ & = (\underline{\quad} \times \underline{\quad}) \times (\underline{\quad} \times \underline{\quad}) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 3 \times 18 \\ & = \underline{\quad} \times (\underline{\quad} + \underline{\quad}) \\ & = (\underline{\quad} \times \underline{\quad}) \times (\underline{\quad} \times \underline{\quad}) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 22 \times 8 \\ & = (\underline{\quad} + \underline{\quad}) \times \underline{\quad} \\ & = (\underline{\quad} \times \underline{\quad}) \times (\underline{\quad} \times \underline{\quad}) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 4 \times 25 \\ & = \underline{\quad} \times (\underline{\quad} + \underline{\quad}) \\ & = (\underline{\quad} \times \underline{\quad}) \times (\underline{\quad} \times \underline{\quad}) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 18 \times 6 \\ & = (\underline{\quad} + \underline{\quad}) \times \underline{\quad} \\ & = (\underline{\quad} \times \underline{\quad}) \times (\underline{\quad} \times \underline{\quad}) \\ & = \underline{\quad} + \underline{\quad} \\ & = \underline{\quad} \end{aligned}$$

# Multiplication Using distributive property

## Answers

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Break the larger number into two addends

$$15 \times 5$$

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Multiply both addends by the other number

$$(\underline{10} \times \underline{5}) + (\underline{5} \times \underline{5})$$

3

Add the 2 products

$$\underline{10} + \underline{5} = \underline{75}$$

Use the distributive property of multiplication to find the product.

$$\begin{aligned} \textcircled{1} \quad & 12 \times 4 \\ & = (10 + 2) \times 4 \\ & = (10 \times \underline{4}) \times (2 \times 4) \\ & = \underline{40} + \underline{8} \\ & = \underline{48} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 4 \times 14 \\ & = 4 \times (\underline{10} + 4) \\ & = (\underline{4} \times \underline{10}) \times (\underline{4} \times \underline{4}) \\ & = \underline{40} + \underline{16} \\ & = \underline{56} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 3 \times 18 \\ & = \underline{3} \times (\underline{10} + \underline{8}) \\ & = (\underline{3} \times \underline{10}) \times (\underline{3} \times \underline{8}) \\ & = \underline{30} + \underline{24} \\ & = \underline{54} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 22 \times 8 \\ & = (\underline{20} + \underline{2}) \times \underline{8} \\ & = (\underline{20} \times \underline{8}) \times (\underline{2} \times \underline{8}) \\ & = \underline{160} + \underline{16} \\ & = \underline{176} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 4 \times 25 \\ & = \underline{4} \times (\underline{20} + \underline{5}) \\ & = (\underline{4} \times \underline{20}) \times (\underline{4} \times \underline{5}) \\ & = \underline{80} + \underline{20} \\ & = \underline{100} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 18 \times 6 \\ & = (\underline{10} + \underline{8}) \times \underline{6} \\ & = (\underline{10} \times \underline{6}) \times (\underline{8} \times \underline{6}) \\ & = \underline{60} + \underline{48} \\ & = \underline{108} \end{aligned}$$