

Multiply Using Mental Math

Use addition to break apart the larger factor.

Find 8×214 .

Think: $214 = 200 + 14$

$$\begin{aligned} 8 \times 214 &= (8 \times 200) + (8 \times 14) \\ &= \underline{1,600} + \underline{112} \\ &= \underline{1,712} \end{aligned}$$

Use subtraction to break apart the larger factor.

Find 6×298 .

Think: $298 = 300 - 2$

$$\begin{aligned} 6 \times 298 &= (6 \times 300) - (6 \times 2) \\ &= \underline{1,800} - \underline{12} \\ &= \underline{1,788} \end{aligned}$$

Use halving and doubling.

Find 14×50 .

Think: 14 can be evenly divided by 2.

$$\begin{aligned} 14 \div 2 &= \underline{7} \\ 7 \times 50 &= \underline{350} \\ 2 \times 350 &= \underline{700} \end{aligned}$$

When multiplying more than two numbers, use the Commutative Property to change the order of the factors.

Find $2 \times 9 \times 50$.

$$\begin{aligned} \text{Think: } 2 \times 50 &= \underline{100} \\ 2 \times 9 \times 50 &= 2 \times \underline{50} \times 9 \\ &= \underline{100} \times 9 \\ &= \underline{900} \end{aligned}$$

Find the product. Tell which strategy you used.

1 $5 \times 7 \times 20$

2 6×321

3 86×50

4 9×399
