

## Mental math — Split and combine

Name: \_\_\_\_\_

Date: \_\_\_\_\_



Split or combine to make the multiplication easy.

$$\begin{aligned} 1 \quad 45 \times 17 \\ &= 45 \times 10 + 45 \times 7 \\ &= \underline{450} + \underline{315} \\ &= \underline{765} \end{aligned}$$

$$\begin{aligned} 2 \quad 12 \times 23 \\ &= 12 \times 20 + 12 \times 3 \\ &= \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 3 \quad 31 \times 9 + 69 \times 9 \\ &= (31 + 69) \times 9 \\ &= \underline{\quad} \times 9 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 4 \quad 15 \times 12 \\ &= 15 \times 10 + 15 \times 2 \\ &= \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 5 \quad 16 \times 18 \\ &= 16 \times 10 + 16 \times 8 \\ &= \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 6 \quad 61 \times 12 - 11 \times 12 \\ &= (61 - 11) \times 12 \\ &= \underline{\quad} \times 12 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 7 \quad 37 \times 12 + 63 \times 12 \\ &= (37 + 63) \times 12 \\ &= \underline{\quad} \times 12 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 8 \quad 73 \times 6 + 27 \times 6 \\ &= (73 + 27) \times 6 \\ &= \underline{\quad} \times 6 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 9 \quad 87 \times 12 - 37 \times 12 \\ &= (87 - 37) \times 12 \\ &= \underline{\quad} \times 12 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 10 \quad 63 \times 6 - 13 \times 6 \\ &= (63 - 13) \times 6 \\ &= \underline{\quad} \times 6 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 11 \quad 49 \times 7 + 51 \times 7 \\ &= (49 + 51) \times 7 \\ &= \underline{\quad} \times 7 \\ &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} 12 \quad 87 \times 4 - 37 \times 4 \\ &= (87 - 37) \times 4 \\ &= \underline{\quad} \times 4 \\ &= \underline{\quad} \end{aligned}$$





## Mental math · Split and combine — Answer key

1.  $45 \times 17 = 45 \times 10 + 45 \times 7 = 450 + 315 = 765$

2.  $12 \times 23 = 12 \times 20 + 12 \times 3 = 240 + 36 = 276$

3.  $31 \times 9 + 69 \times 9 = (31 + 69) \times 9 = 100 \times 9 = 900$

4.  $15 \times 12 = 15 \times 10 + 15 \times 2 = 150 + 30 = 180$

5.  $16 \times 18 = 16 \times 10 + 16 \times 8 = 160 + 128 = 288$

6.  $61 \times 12 - 11 \times 12 = (61 - 11) \times 12 = 50 \times 12 = 600$

7.  $37 \times 12 + 63 \times 12 = (37 + 63) \times 12 = 100 \times 12 = 1200$

8.  $73 \times 6 + 27 \times 6 = (73 + 27) \times 6 = 100 \times 6 = 600$

9.  $87 \times 12 - 37 \times 12 = (87 - 37) \times 12 = 50 \times 12 = 600$

10.  $63 \times 6 - 13 \times 6 = (63 - 13) \times 6 = 50 \times 6 = 300$

11.  $49 \times 7 + 51 \times 7 = (49 + 51) \times 7 = 100 \times 7 = 700$

12.  $87 \times 4 - 37 \times 4 = (87 - 37) \times 4 = 50 \times 4 = 200$