

Note: Complete the work in fair copy and the questions that are marked in red color do it yourself.

Exercise 4.5

A. Fill in the blanks:-

$$\begin{aligned} 1) \quad 12 \times 17 &= 12 \times (10 + 7) \\ &= 12 \times 10 + 12 \times 7 \\ &= 120 + 84 \\ &= 204 \end{aligned}$$

$$\begin{aligned} 2) \quad 11 \times 25 &= 11 \times (20 + 5) \\ &= 11 \times 20 + 11 \times 5 \\ &= 220 + 55 \\ &= 275 \end{aligned}$$

$$\begin{aligned} 3) \quad 15 \times 36 &= 15 \times (30 + 6) \\ &= 15 \times 30 + 15 \times 6 \\ &= 450 + 90 \\ &= 540 \end{aligned}$$

$$\begin{aligned} 4) \quad 42 \times 13 &= (40 + 2) \times 13 \\ &= 40 \times 13 + 2 \times 13 \\ &= 520 + 26 \\ &= 546 \end{aligned}$$

B. Find the product using the distributive property of multiplication:-

$$\begin{aligned} 1) \quad 9 \times 19 &= 9 \times (10 + 9) \\ &= 9 \times 10 + 9 \times 9 \\ &= 90 + 81 \\ &= 171 \end{aligned}$$

$$\begin{aligned} 2) \quad 7 \times 98 &= 7 \times (90 + 8) \\ &= 7 \times 90 + 7 \times 8 \\ &= 630 + 56 \\ &= 686 \end{aligned}$$

$$\begin{aligned} 3) \quad 28 \times 12 &= (20+8) \times 12 \\ &= 20 \times 12 + 8 \times 12 \\ &= 240 + 96 \\ &= 336 \end{aligned}$$

$$\begin{aligned} 4) \quad 16 \times 38 &= 16 \times (30+8) \\ &= 16 \times 30 + 16 \times 8 \\ &= 480 + 128 \\ &= 608 \end{aligned}$$

$$\begin{aligned} 5) \quad 33 \times 13 &= (30+3) \times 13 \\ &= 30 \times 13 + 3 \times 13 \\ &= 390 + 39 \\ &= 429 \end{aligned}$$

$$6) \quad 61 \times 17 =$$