

## Multiplicative Reasoning Name:

$16 \times 20$  is the same as  $16 \times 2 \times 10$

So, we double 16 which is 32 and then multiply by 10 = 320

Our working might look like

$$16 \times 20$$

$$16 \times 20 = 320$$

$$16 \times 2 \times 10$$

$$10 \times 20 + 6 \times 20$$

$$(10 \times 2) + (6 \times 2)$$

$$200 + 120$$

$$20 + 12 = 32$$

$$32 \times 10 = 320$$

### NOTE

If the expression has 2 zeros i.e.  $150 \times 20$  -  $12 \times 200$  -  $6 \times 200$

Then the product has 2 zeros  $300$   $2400$   $1200$

If the expression has 3 zeros i.e.  $200 \times 20$  -  $12 \times 2000$  -  $60 \times 200$

Then the product has 2 zeros  $4000$   $24000$   $12000$

$$15 \times 10 =$$

$$120 \times 10 =$$

$$12 \times 27 =$$

$$12 \times 1000 =$$

$$16 \times 1000 =$$

$$(\underline{\quad} \times 27) + (\underline{\quad} \times 27)$$

$$19 \times 100 =$$

$$210 \times 10 =$$

$$2 \times 20 = 2 \times 7 =$$

$$13 \times 10 =$$

$$220 \times 20 =$$

$$\underline{\quad} + \underline{\quad}$$

$$22 \times 20 =$$

$$310 \times 200 =$$

$$14 \times 26 =$$

$$34 \times 200 =$$

$$40 \times 200 =$$

$$(\underline{\quad} \times 26) + (\underline{\quad} \times 26)$$

$$430 \times 20 =$$

$$60 \times 200 =$$

$$4 \times 20 = 4 \times 6 =$$

$$420 \times 20 =$$

$$800 \times 30 =$$

$$\underline{\quad} + \underline{\quad}$$

$$140 \times 20 =$$

$$50 \times 20 =$$