

## Division Reasoning Name:

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

So .....  $160 \div 20$  is the same as  $160 \div 10 \div 2$

$$160 \div 10 = 16$$

$$16 \div 2 = 8$$

$$\text{So.. } 160 \div 20 = 8$$

We can create equivalent expression by  
x or ÷ both parts of the expression by the same amount

$$\begin{array}{ccc} \begin{array}{cc} \div 10 & \div 10 \\ 160 & \div 20 = 8 \end{array} & \begin{array}{cc} \div 2 & \div 2 \\ 160 \div 20 & = 8 \end{array} \\ 16 \div 2 = 8 & & 80 \div 10 = 8 \end{array}$$

### NOTE

Normally when dividing a multiple of 10 by a multiple of 10, we divide each part of the expression by 10 to remove the zeros.

$$\begin{array}{lllll} \text{i.e.} & 450 \div 50 & 4000 \div 20 & 240 \div 20 & 1800 \div 90 \\ \text{is the same as} & 45 \div 5 & 400 \div 2 & 24 \div 2 & 180 \div 9 & 10 \div 1 \end{array}$$

Normally when dividing a multiple of 100 by a multiple of 100, we divide each part of the expression by 100 to remove the zeros.

$$\begin{array}{llll} \text{i.e.} & 4500 \div 500 & 40000 \div 200 & 24000 \div 200 \\ \text{is the same as} & 45 \div 5 & 40 \div 2 & 240 \div 2 & 10 \end{array}$$

$$a/ 240 \div 20 =$$

$$a/ 1800 \div 200 =$$

$$3624 \div 6 =$$

$$24 \div 2 =$$

$$18 \div 2 =$$

$$3600 \div 6 + 24 \div 6 =$$

$$a/ 270 \div 30 =$$

$$a/ 4800 \div 600 =$$

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

$$27 \div \underline{\quad} =$$

$$48 \div \underline{\quad} =$$

$$4914 \div 7 =$$

$$a/ 420 \div 60 =$$

$$a/ 4900 \div 700 =$$

$$\underline{\quad} \div 7 + \underline{\quad} \div 7 =$$

$$\underline{\quad} \div \underline{\quad} =$$

$$\underline{\quad} \div \underline{\quad} =$$

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

$$a/ 450 \div 50 =$$

$$a/ 2400 \div 800 =$$

$$1827 \div 9 =$$

$$\underline{\quad} \div \underline{\quad} =$$

$$\underline{\quad} \div \underline{\quad} =$$

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

$$a/ 1600 \div 40 =$$

$$a/ 2800 \div 700 =$$

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

$$\underline{\quad} \div \underline{\quad} =$$

$$\underline{\quad} \div \underline{\quad} =$$