

## 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

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

$$16 \div 2 = 8 \quad 80 \div 10 = 8$$

### 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.

i.e.  $450 \div 50$        $4000 \div 20$        $240 \div 20$        $1800 \div 90$        $100 \div 10$   
is the same as     $45 \div 5$        $400 \div 2$        $24 \div 2$        $180 \div 9$        $10 \div 1$

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.

i.e.  $4500 \div 500$        $40000 \div 2000$        $24000 \div 2000$        $1000 \div 100$   
is the same as     $45 \div 5$        $40 \div 2$        $240 \div 2$        $10$

$$a/ 280 \div 20 = \quad a/ 2800 \div 200 = \quad \mathbf{3220 \div 4 =}$$

$$28 \div 2 = \quad 28 \div 2 = \quad \mathbf{3200 \div 4 + 20 \div 4 =}$$

$$a/ 300 \div 30 = \quad a/ 2400 \div 600 = \quad \underline{\quad} + \underline{\quad}$$

$$30 \div \underline{\quad} = \quad 24 \div \underline{\quad} = \quad \mathbf{5614 \div 7 =}$$

$$a/ 360 \div 60 = \quad a/ 2800 \div 700 = \quad \underline{\quad} \div 7 + \underline{\quad} \div 7 =$$

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

$$a/ 400 \div 50 = \quad a/ 5600 \div 800 = \quad \mathbf{7227 \div 9 =}$$

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

$$a/ 2800 \div 40 = \quad a/ 2100 \div 700 = \quad \underline{\quad} + \underline{\quad}$$

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