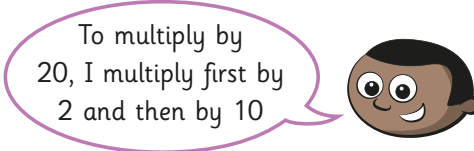


1 Mo is multiplying numbers by 20



a) Use Mo's method to work out the multiplications.

$7 \times 20$

$12 \times 20$

$20 \times 134$

b) Would you get the same answer if you multiplied by 10 first and then by 2?

Write an example.

2 Complete the sentences.

a) To multiply by 50, you multiply by 5 first and then by

b) To multiply by 200, you multiply by  first and then by

c) To multiply by 7,000 you multiply by  first and then by

3 Work out the multiplications.

Show all the steps in your thinking.

- a)  $7 \times 500$       b)  $6,000 \times 8$       c)  $300 \times 90$       d)  $500 \times 300$

4 Complete the calculations.

a)  $300 \times \boxed{\phantom{000}} = 9,000$

d)  $\boxed{\phantom{000}} \times 90 = 27,000$

b)  $6,000 \times \boxed{\phantom{000}} = 18,000$

e)  $500 \times 60 = \boxed{\phantom{000}}$

c)  $700 \times \boxed{\phantom{000}} = 28,000$

f)  $8,000 \times \boxed{\phantom{000}} = 720,000$

5

$42 \times 3 = 126$

Use this fact to solve the calculations.

a)  $42 \times 30$

c)  $300 \times 42$

b)  $420 \times 3$

d)  $42 \times 3,000$

6 Here are two methods to solve  $16 \times 50$

**Method 1**

$$\begin{aligned} 16 \times 10 \times 5 \\ = 160 \times 5 \\ = 800 \end{aligned}$$

**Method 2**

$$\begin{aligned} 16 \times 5 \times 10 \\ = 80 \times 10 \\ = 800 \end{aligned}$$

a) What is the same about the methods?

What is different?

b) What other method could you use to multiply by 50?

Show your method.

c) Share your method with a partner.

7 Jack and Mo are calculating  $3,500 \div 70$

**Jack's workings**

$$\begin{aligned} 3,500 \div 10 &= 350 \\ 350 \times 7 &= 2,450 \end{aligned}$$

**Mo's workings**

$$\begin{aligned} 3,500 \div 10 &= 350 \\ 350 \div 7 &= 50 \end{aligned}$$

4 Complete the calculations.

- a)  $300 \times \square = 9,000$       d)  $\square \times 90 = 27,000$   
 b)  $6,000 \times \square = 18,000$     e)  $500 \times 60 = \square$   
 c)  $700 \times \square = 28,000$       f)  $8,000 \times \square = 720,000$

5

$42 \times 3 = 126$

Use this fact to solve the calculations.

- a)  $42 \times 30$                       c)  $300 \times 42$   
 b)  $420 \times 3$                       d)  $42 \times 3,000$

6 Here are two methods to solve  $16 \times 50$

**Method 1**  
 $16 \times 10 \times 5$   
 $= 160 \times 5$   
 $= 800$

**Method 2**  
 $16 \times 5 \times 10$   
 $= 80 \times 10$   
 $= 800$

- a) What is the same about the methods?  
 What is different?  
 b) What other method could you use to multiply by 50?  
 Show your method.  
 c) Share your method with a partner.

7 Jack and Mo are calculating  $3,500 \div 70$

**Jack's workings**  
 $3,500 \div 10 = 350$   
 $350 \times 7 = 2,450$

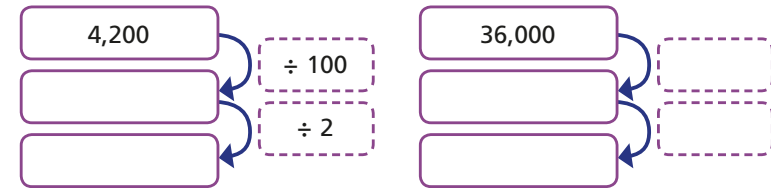
**Mo's workings**  
 $3,500 \div 10 = 350$   
 $350 \div 7 = 50$

- a) Whose workings are correct?  
 b) What mistake has the other person made?

8 Complete the division diagrams.

a)  $4,200 \div 200$

b)  $36,000 \div 6,000$



Complete the division sentences.

- c)  $3,200 \div 80$                       d)  $72,000 \div 9,000$   
 $3,200 \div 800$                        $72,000 \div 900$   
 $72,000 \div 90$

9 Match the calculations to the answers.

One has been done for you.

$8 \times 40$	3,200
$3,200 \div 80$	320
$4 \times 800$	40
$32,000 \div 40$	800

- 10 The answer is 400  
 What could the question be?  
 Write 4 division and 4 multiplication questions.  
 Ask a partner to check your questions.