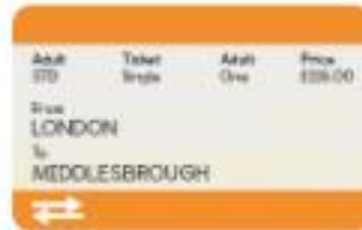


Multiplying 3-Digit Numbers

Lesson 10

In Focus

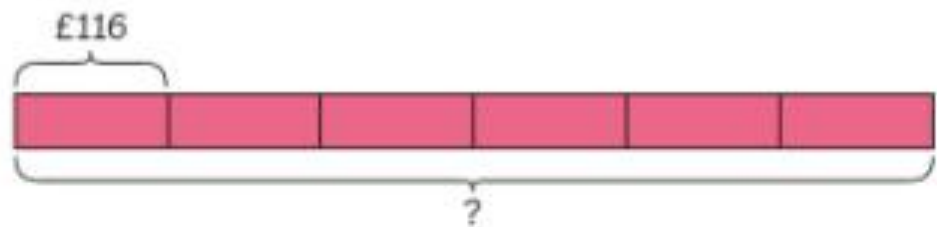
Each ticket from London to Middlesbrough costs £116.



How can we find the cost of 6 tickets from London to Middlesbrough?

Let's Learn

1 $£116 \times 6 =$



100	10	1	1	1	1	1	1
100	10	1	1	1	1	1	1
100	10	1	1	1	1	1	1
100	10	1	1	1	1	1	1
100	10	1	1	1	1	1	1
100	10	1	1	1	1	1	1

$$\begin{array}{r}
 100 \times 6 = 600 \\
 10 \times 6 = 60 \\
 6 \times 6 = 36 \\
 \hline
 116 \times 6 = 696
 \end{array}$$

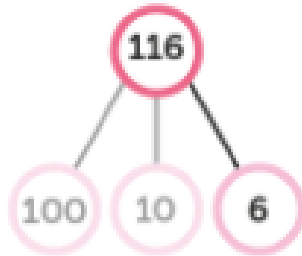
100×6 10×6

6×6

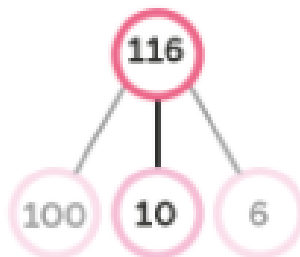
We have 6 lots of 116

The tickets cost £696.

2 $116 \times 6 =$

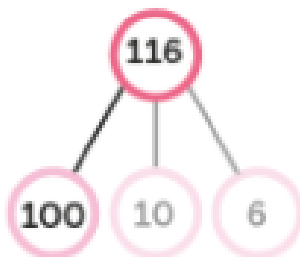


$$\begin{array}{r} 1 1 6 \\ \times 6 \\ \hline 6 \end{array}$$



$$\begin{array}{r} 1 1 6 \\ \times 6 \\ \hline 9 6 \end{array}$$

1 ten \times 6 = 6 tens
6 tens + 3 tens = 9 tens



$$\begin{array}{r} 1 1 6 \\ \times 6 \\ \hline 6 9 6 \end{array}$$

1 hundred \times 6
= 6 hundreds



$116 \times 6 = 696$

Golden rule: Multiply the ones, multiply the tens, multiply the hundreds!

3

$8 \times 512 = \square$

500	10	2
500	10	2
500	10	2
500	10	2
500	10	2
500	10	2
500	10	2
500	10	2

$8 \times 500 = 4000$

$8 \times 10 = 80$

$8 \times 2 = 16$

$8 \times 512 = 4000 + 80 + 16$

$= \square$

	5	1	2
\times			8
		1	6
		8	0
+	4	0	0
	4	0	9

multiply the ones

multiply the tens

multiply the hundreds

Guided Practice

1

$135 \times 2 = \square$

100	10	10	10	1	1	1	1	1
-----	----	----	----	---	---	---	---	---

$100 \times 2 = \square$

$30 \times 2 = \square$

$5 \times 2 = \square$

$135 \times 2 = \square$

2

$3 \times 428 = \square$

100	100	10	10	1	1	1	1
100	100			1	1	1	1

$3 \times 428 = 428 \times 3$



$400 \times 3 = \square$

$20 \times 3 = \square$

$8 \times 3 = \square$

$428 \times 3 = \square$

3 Multiply.

(a) $312 \times 7 =$

$$\begin{array}{r} 312 \\ \times 7 \\ \hline 214 \\ + 218 \\ \hline 2184 \end{array}$$

(b) $4 \times 216 =$



$4 \times 216 = 216 \times 4$

$$\begin{array}{r} 216 \\ \times 4 \\ \hline 864 \\ + 864 \\ \hline 8640 \end{array}$$

4 Multiply.

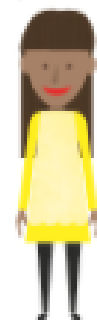
(a) $314 \times 8 =$

$$\begin{array}{r} 314 \\ \times 8 \\ \hline \\ \hline \end{array}$$

(b) $7 \times 109 =$

$$\begin{array}{r} 109 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$7 \times 109 = 109 \times 7$



5 Find the product of 116 and 6.

Can you remember what product means?

Name: _____ Class: _____ Date: _____

Worksheet 10

Multiplying 3-Digit Numbers

1 Multiply to find:

(a) $123 \times 4 =$

$100 \times 4 =$

$20 \times 4 =$

$3 \times 4 =$

+ +

$=$

(b) $217 \times 3 =$

$200 \times 3 =$

$10 \times 3 =$

$7 \times 3 =$

+ +

$=$

(c) $719 \times 5 =$

$700 \times 5 =$

$10 \times 5 =$

$9 \times 5 =$

+ +

$=$

(d) $806 \times 7 =$

$800 \times 7 =$

$0 \times 7 =$

$6 \times 7 =$

+ +

$=$

2 Multiply.

$$\begin{array}{r} 316 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

$$316 \times 6 = \boxed{}$$

$$\begin{array}{r} 423 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

$$423 \times 4 = \boxed{}$$

$$\begin{array}{r} 913 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

$$913 \times 7 = \boxed{}$$

$$\begin{array}{r} 516 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

$$516 \times 5 = \boxed{}$$

3 Multiply.

$$(a) \quad 118 \times 3 = \boxed{}$$

$$(c) \quad 5 \times 215 = \boxed{}$$

$$(e) \quad 324 \times 3 = \boxed{}$$

$$(g) \quad 2 \times 435 = \boxed{}$$

$$(i) \quad 719 \times 5 = \boxed{}$$

$$(b) \quad 4 \times 218 = \boxed{}$$

$$(d) \quad 349 \times 2 = \boxed{}$$

$$(f) \quad 637 \times 2 = \boxed{}$$

$$(h) \quad 3 \times 629 = \boxed{}$$

$$(j) \quad 524 \times 4 = \boxed{}$$

Extension

Challenge yourself with this extension question

Teddy and his mum were having a reading competition.
In one month, Teddy read 814 pages.



His mum read 4 times as many pages as Teddy.

How many pages did they read altogether?

How many fewer pages did Teddy read?

Use a bar model to help you

Name: _____ Class: _____ Date: _____

Worksheet 10

Multiplying 3-Digit Numbers

1 Multiply to find:

(a) $123 \times 4 =$ 492

$100 \times 4 =$ 400

$20 \times 4 =$ 80

$3 \times 4 =$ 12

400 + 80 + 12

= 492

(b) $217 \times 3 =$ 651

$200 \times 3 =$ 600

$10 \times 3 =$ 30

$7 \times 3 =$ 21

600 + 30 + 21

= 651

(c) $719 \times 5 =$ 3595

$700 \times 5 =$ 3500

$10 \times 5 =$ 50

$9 \times 5 =$ 45

3500 + 50 + 45

= 3595

(d) $806 \times 7 =$ 5642

$800 \times 7 =$ 5600

$0 \times 7 =$ 0

$6 \times 7 =$ 42

5600 + 0 + 42

= 5642

2 Multiply.

$$\begin{array}{r}
 \text{(a)} \quad \begin{array}{r} 316 \\ \times \quad 6 \\ \hline 1896 \end{array}
 \end{array}$$

$$316 \times 6 = \boxed{1896}$$

$$\begin{array}{r}
 \text{(b)} \quad \begin{array}{r} 423 \\ \times \quad 4 \\ \hline 1692 \end{array}
 \end{array}$$

$$423 \times 4 = \boxed{1692}$$

$$\begin{array}{r}
 \text{(c)} \quad \begin{array}{r} 913 \\ \times \quad 7 \\ \hline 6391 \end{array}
 \end{array}$$

$$913 \times 7 = \boxed{6391}$$

$$\begin{array}{r}
 \text{(d)} \quad \begin{array}{r} 516 \\ \times \quad 5 \\ \hline 2580 \end{array}
 \end{array}$$

$$516 \times 5 = \boxed{2580}$$

3 Multiply.

$$\text{(a)} \quad 118 \times 3 = \boxed{354}$$

$$\text{(b)} \quad 4 \times 218 = \boxed{872}$$

$$\text{(c)} \quad 5 \times 215 = \boxed{1075}$$

$$\text{(d)} \quad 349 \times 2 = \boxed{698}$$

$$\text{(e)} \quad 324 \times 3 = \boxed{972}$$

$$\text{(f)} \quad 637 \times 2 = \boxed{1274}$$

$$\text{(g)} \quad 2 \times 435 = \boxed{870}$$

$$\text{(h)} \quad 3 \times 629 = \boxed{1887}$$

$$\text{(i)} \quad 719 \times 5 = \boxed{3595}$$

$$\text{(j)} \quad 524 \times 4 = \boxed{2096}$$