

X / ÷ Study Guide

$$\begin{array}{r} 7 \times 6 = 42 \\ \text{factor} \quad \text{product} \end{array}$$

1) Multiplying by Multiples of 10:

a. $4 \times 10 = 40$
 $4 \times 100 = 400$
 $4 \times 1000 = 4000$

0's in equation = 0's in product

b. exception with 5s

$$\begin{array}{l} 5 \times 2 = 10 \\ 5 \times 20 = 100 \\ 5 \times 200 = 1000 \end{array}$$

2) Estimating Products

a. $56 \times 9 \rightarrow \begin{array}{r} 60 \\ \times 9 \\ \hline 540 \end{array}$

* Do not estimate single digit #

b. $514 \times 9 \rightarrow \begin{array}{r} 500 \\ \times 9 \\ \hline 4500 \end{array}$

3) X Large #'s

a. $\begin{array}{r} 64 \\ \times 7 \\ \hline 448 \end{array}$

b. $\begin{array}{r} 642 \\ \times 7 \\ \hline 4494 \end{array}$

* 2-digit #'s (X) by 1-digit

and

* 3-digit #'s (X) by 1-digit

Step 1: $4 \times 7 = 28$
carry over to tens place value
Ones Place value

Step 2: $6 \times 7 = 42$
 $42 + 2 = 44$

4) Estimating Quotients

$$42 \div 7 = 6$$

↑
← divisor
 dividend ↑ quotient

a. $37 \div 4 \approx 9$

$\downarrow \quad \nearrow$
 $4 \times \underline{9} = \underline{36}$ (use a \otimes fact to solve)

5) Long Division

a.
$$\begin{array}{r} 14 \\ 6 \overline{) 84} \\ \underline{-6} \downarrow \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

b.
$$\begin{array}{r} 8 \text{ R}1 \\ 3 \overline{) 25} \\ \underline{-24} \\ 1 \end{array}$$

c.
$$\begin{array}{r} 402 \\ 2 \overline{) 804} \\ \underline{-8} \downarrow \\ 00 \downarrow \\ \underline{-0} \downarrow \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

d.
$$\begin{array}{r} 20 \text{ R}2 \\ 6 \overline{) 122} \\ \underline{-12} \downarrow \\ 02 \\ \underline{-0} \\ 2 \end{array}$$

Does	(÷)	
M ^c Donalds	(x)	
Sell	(-)	
Cheese	(check)	
Burgers?	(bring down)	

LESSON

1

1. Find each product.

a) 6×700

b) 900×8

c) 5×60

d) 80×4

e) 200×5

f) 3×70

g) 7×400

h) 90×2



2. Find each missing number.

a) $5 \times \square = 300$

b) $20 \times \square = 140$

c) $\square \times 6 = 600$

d) $\square \times 7 = 210$

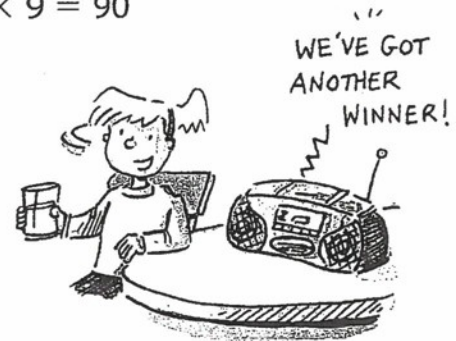
e) $40 \times \square = 240$

f) $\square \times 9 = 90$

3. A radio station gives away a \$300 prize every day for a week.

How much will the radio station have given away by the end of the week?

Show your work.



2

4. Estimate each product.

a) 5×31

b) 7×63

c) 8×56

d) 4×69

3
5

5. There are 6 rows of chairs set up for the concert.

In each row, there are 45 chairs.

How many chairs are there?

Show your work.

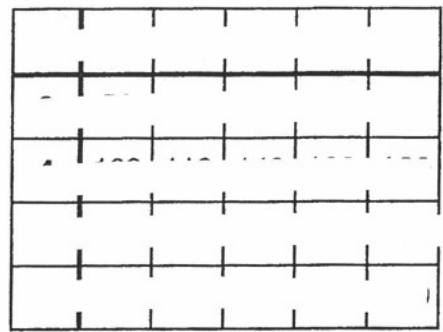
6. Multiply

a)
$$\begin{array}{r} 29 \\ \times 2 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 73 \\ \times 3 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 34 \\ \times 6 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 95 \\ \times 4 \\ \hline \end{array}$$



7. Multiply.

a) 178	b) 319	c) 164	d) 462
$\times 6$	$\times 3$	$\times 2$	$\times 5$

8. Estimate each quotient.

Use a \otimes fact to help you solve.

a) $32 \div 6 \approx$	b) $65 \div 8 \approx$
c) $26 \div 9 \approx$	d) $43 \div 7 \approx$

9. Divide.

a) $42 \div 3$	b) $52 \div 4$
c) $65 \div 5$	d) $78 \div 6$
e) $91 \div 7$	f) $88 \div 8$
g) $99 \div 9$	h) $34 \div 2$

10. A series on TV runs for 25 hours.
One videotape can record 4 hours.
Write a word problem using these data.
Solve the problem.
Show your work.

13. Divide.

a) $876 \div 5$	b) $765 \div 3$
c) $621 \div 2$	d) $132 \div 6$
e) $398 \div 7$	f) $454 \div 8$
g) $187 \div 9$	h) $243 \div 4$

UNIT
8 Learning Goals

- use personal strategies to multiply
- estimate products
- use models and arrays to multiply and divide
- multiply a 2-digit and a 3-digit number by a 1-digit number
- estimate quotients
- divide a 2-digit number by a 1-digit number
- use personal strategies to divide
- relate multiplication and division
- identify patterns in multiplication and division