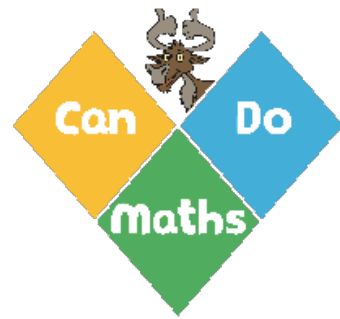




Colin and Coco's Deliberate Practice

Year 3 Unit 9

Multiplication and Division

Answers





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

	Do It	Challenge It	Play It
Multiply 2-digit numbers by 10 using place value	1		
Multiply 1-digit numbers by multiples of 10 using place value	1		1
Use the distributive law to multiply a teens number by a one-digit number		1	
Use the distributive law to multiply a two-digit number by a one-digit number		1	
Multiply 2-digit numbers by a 1-digit number using a formal written method (regroup ones)	2		
Multiply 2-digit numbers by a 1-digit number using a formal written method (regroup tens)	2	2	
Multiply 2-digit numbers by a 1-digit number using a formal written method (multiple)			2
Use efficient methods to multiply a two-digit number by a one-digit number			3
Divide near multiples by 2, 3, 4, 5, 8, 10 with remainders		3	
Divide a 3-digit multiple of ten by 10 using place value	3		
Use known facts and place value when dividing mentally by 2, 3, 4, 5, and 8 e.g. $120 \div 4$	4		
Use partitioning to divide by a single digit number where the quotient is a teens number		4	
Use multiplication or division to solve scaling or correspondence problems			4



Calculate:

Do It 1

$$30 \times 10 = \boxed{300}$$

$$10 \times 39 = \boxed{390}$$

$$70 \times 3 = \boxed{210}$$

$$27 \times 10 = \boxed{270}$$

$$75 \times 10 = \boxed{750}$$

$$90 \times 5 = \boxed{450}$$

$$43 \times 10 = \boxed{430}$$

$$20 \times 3 = \boxed{60}$$

$$40 \times 8 = \boxed{320}$$

$$61 \times 10 = \boxed{610}$$

$$40 \times 6 = \boxed{240}$$

$$90 \times 6 = \boxed{540}$$

Find the missing digits

Challenge It 1

Solve each statement in several ways where possible.

$$1 \boxed{7} \times 4 = \boxed{4} 0 + \boxed{2} \boxed{8} = \boxed{6} 8$$

$$\boxed{9} 5 \times \boxed{3} = \boxed{2} \boxed{7} 0 + \boxed{1} 5 = \boxed{2} 8 \boxed{5}$$

Solve them altogether using the digits 1, 2, 3, 4, 5, 6, 7, 8, and 9 at least once each.



Multiply Multiples of 10 Game

Play It 1

You need:

Card Set A (print off the cards) for each player

Card Set B (print off the cards) for each player

Game boards 1 and 2 each

To play:

Each player shuffles Card Set A, places them face down and picks 2 cards and places them on their Game Board 1 and 2

Each player shuffles Card Set B, places them face down and picks 2 cards and places them on their Game Board 1 and 2

Both players now find the answer to their two calculations and then find the difference between their two products.

The player with the smallest difference wins a point.

To win:

The winner is the first player to get 10 points.

Game Board 1

$$\boxed{A} \quad \boxed{0} \times \boxed{B}$$

Game Board 2

$$\boxed{A} \quad \boxed{0} \times \boxed{B}$$



Set A

1 2 3 4

5 6 7 8 9

Set B

2 3 4 5 8



Calculate:

Do It 2

$$\begin{array}{r} 16 \\ \times 3 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 32 \\ \times 3 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 21 \\ \times 6 \\ \hline 126 \end{array}$$

$$\begin{array}{r} 63 \\ \times 3 \\ \hline 189 \end{array}$$

$$\begin{array}{r} 31 \\ \times 3 \\ \hline 93 \end{array}$$

$$\begin{array}{r} 23 \\ \times 3 \\ \hline 69 \end{array}$$

$$\begin{array}{r} 82 \\ \times 4 \\ \hline 328 \end{array}$$

$$\begin{array}{r} 93 \\ \times 3 \\ \hline 279 \end{array}$$

Match the calculation to the answer.
Find the missing buddies.

Challenge It 2

23×2	108
31×3	219
54×2	46
73×3	568
41×8	93
71×8	159
53×3	186
52×4	249
93×3	208
83×3	279
62×3	328



Multiplication Game

Play It 2

You need:

Card Set (print off the cards) for each player
A Game Board each

To play:

The players agree a target between 200 and 400

Each player shuffles card sets A and B, places them face down and picks 2 cards from Set A and 1 card from Set B.

Each player places the cards on their Game Board. Both players find the answer to their calculation.

The player with an answer that is equal to, or closest to, the target number wins one point.

Choose a new target and play again.

To win:

The winner is the first player to score 10 points.

Game Board

$$\boxed{A} \boxed{A} \times \boxed{B}$$

Card Set A

5	6	7	8	9
---	---	---	---	---

Card Set B

2	3	4	5	8
---	---	---	---	---



Calculate:

Do It 3

$$130 \div 10 = \boxed{13}$$

$$720 \div 10 = \boxed{72}$$

$$300 \div 10 = \boxed{30}$$

$$270 \div 10 = \boxed{27}$$

$$990 \div 10 = \boxed{99}$$

$$700 \div 10 = \boxed{70}$$

$$430 \div 10 = \boxed{43}$$

$$340 \div 10 = \boxed{34}$$

$$900 \div 10 = \boxed{90}$$

$$610 \div 10 = \boxed{61}$$

$$890 \div 10 = \boxed{89}$$

$$500 \div 10 = \boxed{50}$$

Find the missing digits.

Challenge It 3

Solve each statement in several different ways.

$$\boxed{3} \boxed{0} \div 4 = \boxed{7} \text{ r } \boxed{2}$$

$$\boxed{1} \boxed{9} \div \boxed{5} = 3 \text{ r } 4$$

$$\boxed{6} 0 \div \boxed{8} = 7 \text{ r } \boxed{4}$$

Solve them together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 once each.



Head / Jottings / Written Game

Play It 3

You need:

0 - 9 dice

Cards 2, 3, 4, 5, 8 and 10

To play:

Cards are shuffled and placed face down.

Each player throws the dice twice to make a two-digit number and picks a card. Multiply the two-digit number by the number on the card using an efficient method, either mentally, with jottings or a formal written method.

The player with the higher product scores a point.

To win:

The winner is the first player to get 10 points.

2

3

4

5

8

10



Calculate:

$150 \div 5 = 30$

$320 \div 8 = 40$

$300 \div 5 = 60$

$270 \div 3 = 90$

$560 \div 8 = 70$

$400 \div 8 = 50$

$240 \div 6 = 40$

$720 \div 8 = 90$

$600 \div 5 = 120$

$450 \div 5 = 90$

$440 \div 4 = 110$

$880 \div 8 = 110$

Match the calculation to the answer.
Find the missing buddies.

Challenge It 4

$75 \div 5$	17
$48 \div 3$	14
$68 \div 4$	15
$42 \div 3$	23
$95 \div 5$	16
$69 \div 3$	21
$84 \div 4$	24
$78 \div 3$	22
$90 \div 5$	26
$110 \div 5$	18
$96 \div 4$	19



Scaling Tables Game

Play It 4

You need:

0 - 9 dice

To play:

Players take turns to throw the dice twice to represent a number of tables and a number of chairs around each table.

If there three times as many tables, how many chairs will there be in total?

This is the number the player scores.

To win:

The winner is the first player to score 150

Play again with four times as many tables.