



Colin and Coco's Deliberate Practice

Year 5 Unit 7A

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 numbers up to 4 digits by a one-digit number using short multiplication	1		1
Multiply 2-digit by 2-digit numbers using the distributive law		1	
Multiply 2-digit by 2-digit numbers using long multiplication			2
Multiply 3-digit numbers by 2-digit numbers using long multiplication		2	
Multiply 4-digit numbers by 2-digit numbers using long multiplication	2		
Use efficient methods to multiply mentally	3		
Use known facts and place value to multiply a whole number by a decimal		3	3
Multiply a one-digit number by a decimal (1dp) using a formal written method		4	4
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Use a formal written method to calculate:

1. 2323×3 **6969** 5. 3521×6 **21126** 9. 3214×9 **28926**

2. 2134×3 **6402** 6. 5236×6 **31416** 10. 2370×9 **21330**

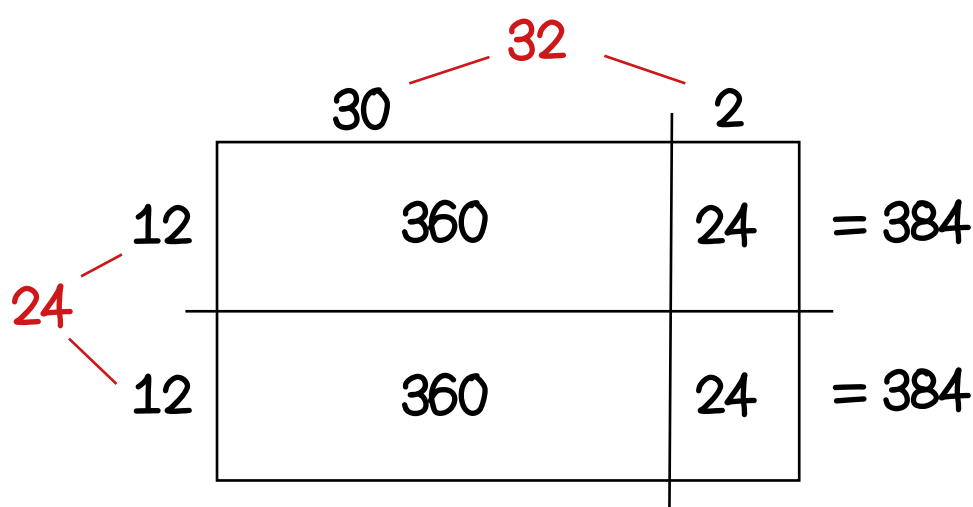
3. 3424×4 **13696** 7. 4326×8 **34608** 11. 3046×7 **21322**

4. 3216×4 **12864** 8. 3504×8 **28032** 12. 5207×7 **36449**

Challenge It 1

Partition the numbers in several different ways to carry out the calculation.
Sketch an array each time to show your thinking.
One has been done for you.

$$24 \times 32$$



$$\text{total} = 768$$



Multiplication Game

Play It 1

You need:

Two sets of 0 - 9 cards

To play:

Agree a target between 15,000 and 30,000

Shuffle the cards and deal 5 cards to each player.

Each player makes a 4-digit number that they multiply by their fifth number.

The player whose answer is closest to the target scores a point.

Agree a new target and play again.

To win:

The winner is the first player to score 5 points.



Use a formal written method to calculate:

1. 2323×32 74,336

7. 4326×18 77,868

2. 2134×23 49,082

8. 3504×36 126,144

3. 3424×41 140,384

9. 4352×42 182,784

4. 3216×24 77,184

10. 5316×27 143,532

5. 3521×26 91,546

11. 6473×26 168,298

6. 5236×34 178,024

12. 2739×37 101,343

Find the missing digits.
Solve it in more than one way if possible.

Challenge It 2

$$\begin{array}{r} 3\boxed{5}\boxed{6} \\ \times 4\boxed{3} \\ \hline \boxed{1}068 \\ 14\boxed{2}\boxed{4}0 \\ \hline 153\boxed{0}8 \end{array}$$

Solve it using the digits 0, 1, 2, 3, 4, 5 and 6



2-digit x 2-digit Game

Play It 2

You need:

Two sets of 1 - 9 cards

To play:

Agree a target between 1,500 and 3,500

Shuffle the cards and deal 4 cards to each player.

Each player makes two 2-digit numbers that they multiply together.

The player whose answer is closest to the target scores a point.

Agree a new target and play again.

To win:

The winner is the first player to score 5 points.



Do It 3

Use an efficient mental strategy and jottings to calculate:

$$248 \times 50 = \boxed{12,400}$$

$$624 \times 50 = \boxed{31,200}$$

$$884 \times 50 = \boxed{44,200}$$

$$64 \times 50 = \boxed{3200}$$

$$82 \times 50 = \boxed{4100}$$

$$606 \times 50 = \boxed{30,300}$$

$$484 \times 25 = \boxed{12,100}$$

$$35 \times 99 = \boxed{3465}$$

$$700 \times 99 = \boxed{69,300}$$

$$812 \times 25 = \boxed{20,300}$$

$$82 \times 99 = \boxed{8118}$$

$$416 \times 25 = \boxed{10,400}$$

Challenge It 3

Make each statement true in several different ways where possible.

$$0.3 \times \boxed{9} = 2.\boxed{7}$$

$$\boxed{4} \times 0.7 = \boxed{2}.\boxed{8}$$

$$\boxed{5}.\boxed{4} = 9 \times 0.\boxed{6}$$

$$\boxed{3} \times \boxed{0}.\boxed{5} = \boxed{1}.\boxed{5}$$

Solve them altogether using the digits 0 - 9 once each.



Multiply Whole Numbers by Decimals Game

Play It 3

You need:

0 - 9 Dice

0 - 10 blank number line

To play:

Players take it in turns to roll the dice twice to create a whole number and a number with one decimal place less than 1

Multiply the numbers together and plot the answer on the number line, convincing your partner that you are plotting it in the correct place.

For example: Player 1 rolls 4 and 6

They calculate $4 \times 0.6 = 2.4$ and plot 2.4 on the number line.

To win:

The winner is the first player to plot four points without any of their opponent's points in between.



Use a formal written method to calculate:

- | | | | |
|--------------------|-------|---------------------|-------|
| 1. 2.32×4 | 9.28 | 7. 6×1.82 | 10.92 |
| 2. 4.23×3 | 12.69 | 8. 7×3.66 | 25.62 |
| 3. 5.34×5 | 26.7 | 9. 8×4.76 | 38.08 |
| 4. 6.24×4 | 24.96 | 10. 6×2.76 | 16.56 |
| 5. 4.43×6 | 26.58 | 11. 7×5.88 | 41.16 |
| 6. 5.65×3 | 16.95 | 12. 9×3.83 | 34.47 |

Challenge It 4

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

5.6 x 4	48.6
6.5 x 7	39.6
4.6 x 8	22.4
5.4 x 9	22
6.4 x 8	58.5
6.6 x 6	45.5
5.5 x 4	44.8
5.6 x 8	51.2
6.5 x 9	36.8



Multiply Whole Numbers by Decimals (2) Game

Play It 4

You need:

0 - 9 dice

To play:

Players take it in turns to roll the dice three times to make a decimal number with two decimal places less than 1 and a whole number.

Multiply the numbers together.

The player with the larger product scores a point.

To win:

The winner is the first player to score 5 points.