

Year 6 Maths

Week 14 Lesson 4

Decimals – Multiplying



In this lesson you will:

- Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places;
- Solve problems which require answers to be rounded to specified degrees of accuracy.



Introduction

What is the value of the 8 in the following numbers?

0.83

0.38

381.41

0.008

841,126

Introduction

What is the value of the 8 in the following numbers?

0.83

0.38

381.41

0.008

841,126

8 tenths

8 hundredths

8 tens

8 thousandths

**8 hundred
thousands**

Varied Fluency 1

Multiply the following number.

72.916

x 10

x 100

x 1,000

Varied Fluency 1

Multiply the following number.

72.916

x 10

729.16

x 100

7,291.6

x 1,000

72,916

Varied Fluency 2

Select the correct answer.

$$38.134 \times 100 = \boxed{}$$

3,813.4

38,134

38,314

Varied Fluency 2

Select the correct answer.

$$38.134 \times 100 = \boxed{}$$

3,813.4

38,134

38,314

Varied Fluency 3

Which calculation is incorrect?

A. 774.9 x 10 = 7,749

B. 8.327 x 100 = 832.7

C. 43.8 x 1,000 = 4,380

Varied Fluency 3

Which calculation is incorrect?

A. $774.9 \times 10 = 7,749$

B. $8.327 \times 100 = 832.7$

C. $43.8 \times 1,000 = 4,380$

Varied Fluency 4

Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

93.56

=

93,560

154.63

=

1,546.3

37.93

=

3,793

Varied Fluency 4

Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

$$93.56 \quad \boxed{\times 1,000} \quad = \quad 93,560$$

$$154.63 \quad \boxed{\times 10} \quad = \quad 1,546.3$$

$$37.93 \quad \boxed{\times 100} \quad = \quad 3,793$$

Main Tasks – part i

Level 1

1a. Multiply the following number by 10, 100 and 1,000.

	Th	H	T	O	•	t	h
				5	•	6	8
x 10					•		
x 100					•		
x 1,000					•		



VF

2a. Select the correct answer.

$$2.57 \times 100 = \boxed{}$$

25.7

257

2,570



VF

Level 2

5a. Multiply the following number.

12.349

x 10

x 100

x 1,000



VF

6a. Select the correct answer.

$$463.79 \times 100 = \boxed{}$$

46,379

4,637.9

463.790



VF

Level 3

9a. Multiply the following number.

72.916

x 10

x 100

x 1,000

x 20

x 200

x 2,000



VF

10a. Select the correct answer.

$$963.79 \times 200 = \boxed{}$$

19,275.8

192,758

96,379



VF

Main Tasks – part ii

Level 1

3a. Which calculation is incorrect?

A. $92.6 \times 10 = 926$

B. $3.65 \times 100 = 36.5$

C. $8.24 \times 1,000 = 8,240$



VF

4a. Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

A. $2.46 \times \square = 2,460$

B. $81.54 \times \square = 815.4$

C. $6.39 \times \square = 639$



VF

Level 2

7a. Which calculation is incorrect?

A. $245.3 \times 20 = 4,906$

B. $4.94 \times 100 = 49.4$

C. $0.49 \times 1,000 = 490$



VF

8a. Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

A. $0.728 \times \square = 72.8$

B. $18.54 \times \square = 185.4$

C. $5.984 \times \square = 5,984$



VF

Level 3

11a. Which calculation is incorrect?

A. $824.68 \times 50 = 41,234$

B. $44.4 \times 10 \times 10 = 4,440$

C. $4.840 \times 2,000 = 96,800$



VF

12a. Use the multiplication cards to complete the following calculations.

x 50

x 200

x 1,000

A. $92.68 \times \square = 18,536$

B. $18.54 \times \square = 927$

C. $3.983 \times \square = 3,983$



VF

Developing

1a. 56.8; 568; 5,680

2a. 257

3a. B is incorrect.

4a. A: $\times 1,000$; B: $\times 10$; C: $\times 100$

Expected

5a. 123.49; 1,234.9; 12,349

6a. 46,379

7a. B is incorrect.

8a. A: $\times 100$; B: $\times 10$; C: $\times 1,000$

Greater Depth

9a. 729.16; 7,291.6; 72,916; 1,458.32;

14,583.2; 145,832

10a. 192,758

11a. C is incorrect.

12a. A: $\times 200$; B: $\times 50$; C: $\times 1,000$

Here are the answers. How did you do?

There's going to be two more pages of questions. If you made some mistakes then great! Mistakes are brilliant as we remember them and learn from them.

The following questions are similar to the previous ones, so apply what you learnt from the previous ones.

You may also want to move up a level if you're feeling confident.

Main Tasks – part iii

Level 1

1b. Multiply the following number by 10, 100 and 1,000.

	Th	H	T	O	•	t	h
				8	•	2	9
x 10					•		
x 100					•		
x 1,000					•		



VF

2b. Select the correct answer.

$$43.51 \times 100 = \boxed{}$$

43,510

4,351

435.1



VF

Level 2

5b. Multiply the following number.

43.718

x 10

x 100

x 1,000



VF

6b. Select the correct answer.

$$825.23 \times 100 = \boxed{}$$

825,230

82,523

825.230



VF

Level 3

9b. Multiply the following number.

85.069

x 10

x 100

x 1,000

x 50

x 500

x 5,000



VF

10b. Select the correct answer.

$$284.37 \times 20 = \boxed{}$$

568.74

56,874

5,687.4



VF

Main Tasks – part iv

Level 1

3b. Which calculation is incorrect?

A. $74.66 \times 10 = 746.6$

B. $5.29 \times 100 = 529$

C. $9.13 \times 1,000 = 91.30$



VF

4b. Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

A. $37.85 \times \square = 378.5$

B. $4.22 \times \square = 4,220$

C. $1.97 \times \square = 197$



VF

Level 2

7b. Which calculation is incorrect?

A. $87.6 \times 50 = 4,380$

B. $9.454 \times 100 = 94.54$

C. $165.98 \times 1,000 = 165,980$



VF

8b. Use the multiplication cards to complete the following calculations.

x 10

x 100

x 1,000

A. $35.650 \times \square = 35,650$

B. $0.874 \times \square = 8.74$

C. $968.48 \times \square = 96,848$



VF

Level 3

11b. Which calculation is incorrect?

A. $41.684 \times 200 = 8,336.8$

B. $548.34 \times 300 = 5,483.4$

C. $90.22 \times 10 \times 100 = 90,220$



VF

12b. Use the multiplication cards to complete the following calculations.

x 500

x 100

x 2,000

A. $6.050 \times \square = 605$

B. $41.93 \times \square = 20,965$

C. $7.28 \times \square = 14,560$



VF

Developing

1b. 82.9; 829; 8,290

2b. 4,351

3b. C is incorrect.

4b. A: x 10; B: x 1,000; C: x 100

Expected

5b. 437.18; 4,371.8; 43,718

6b. 82,523

7b. B is incorrect.

8b. A: x 1,000; B: x 10; C: x 100

Greater Depth

9b. 850.69; 8,506.9; 85,069; 4,253.45;
42,534.5; 425,345

10b. 5,687.4

11b. B is incorrect.

12b. A: x 100; B: x 500; C: x 2,000

Well done!

If there's anything you are still unsure of from today's lesson please contact your teacher.