YEAR 7 · DECIMALS

Multiplying Decimals by 10, 100, 1000

Name _____ Date _____

> The decimal point stays fixed. When you multiply, each digit moves into a higher place-value column.

A. Calculate

Multiply each decimal by the given power of 10.

1 $4.6 \times 10 =$ _____

2 $0.38 \times 100 =$ _____

3 $7.025 \times 10 =$ _____

4 $0.009 \times 1000 =$ _____

5 $12.4 \times 100 =$ _____

6 $3.06 \times 1000 =$ _____

7 $0.57 \times 10 =$ _____

8 $8.19 \times 100 =$ _____

B. Complete each equation

Use 10, 100 or 1000 for each missing multiplier.

9 $0.64 \times$ _____ $= 64$

10 _____ $\times 100 = 38$

11 $5.07 \times 1000 =$ _____

12 $0.8 \times$ _____ $= 800$

13 _____ $\times 10 = 6.3$

14 $2.35 \times 100 =$ _____

C. Use decimals in context

Show your working and include the correct units.

15 A notebook costs £1.25. What is the cost of 10 notebooks?

Working _____

Answer £ _____

16 Each raffle ticket costs £0.35. Find the cost of 100 tickets.

Working _____

Answer £ _____

D. Think about place value

Explain your thinking clearly.

17 A pupil writes: “0.46 × 100 = 0.4600.” Explain the mistake using place-value language.

18 Circle the expression with the greatest product. How does the multiplier help you decide?

○ 0.62 × 10 ○ 0.62 × 100 ○ 0.62 × 1000

Before you finish, check that each product makes sense compared with the starting number.