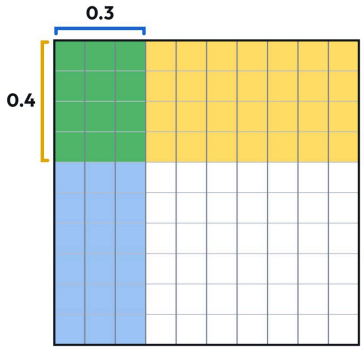
Name _____ Date _____

Multiplying Decimals

Example

0.3 × 0.4 = 0.12

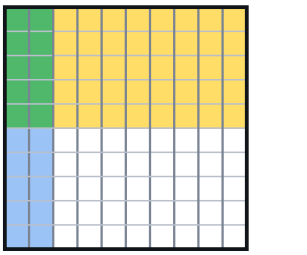


Blue is 0.3, yellow is 0.4, and green is 0.3 of 0.4: 12 of 100 squares.

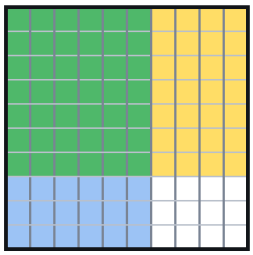
$$\frac{3}{10} \times \frac{4}{10} = \frac{12}{100} = 0.12$$

Tenths times tenths give **hundredths**.

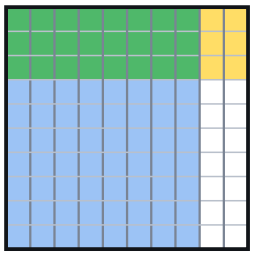
1 ON YOUR OWN Which calculation does the picture show? Write it.



□ × □ = □



□ × □ = □



□ × □ = □

2 ON YOUR OWN Work out using fractions.

$$0.4 \times 0.6 = \frac{4}{10} \times \frac{6}{10} = \frac{\square}{100} = \square$$

$$0.07 \times 0.3 = \frac{7}{100} \times \frac{3}{10} = \frac{\square}{1000} = \square$$

$$1.5 \times 0.2 = \frac{15}{10} \times \frac{2}{10} = \frac{\square}{100} = \square$$

Names (pair) _____ Date _____

Remember

Multiply as whole numbers; the product has as many decimal places as **both factors together**: $0.3 \times 0.4 \rightarrow 3 \times 4 = 12$, two decimal places $\rightarrow 0.12$. Check the point with an estimate.

3 IN PAIRS Without calculating, write <, > or =. When is the product less than 8?

$8 \times 0.9 \bigcirc 8$ $8 \times 1.2 \bigcirc 8$ $8 \times 0.5 \bigcirc 8$ $8 \times 1 \bigcirc 8$

4 ON YOUR OWN First estimate, then work it out.

2.4×1.5 estimate: ☐ answer: ☐

0.6×0.8 estimate: ☐ answer: ☐

3.2×0.05 estimate: ☐ answer: ☐

5 IN PAIRS Who is right? Explain.

Ana: $0.2 \times 0.3 = 0.6$. **true** / **false**

Why? _____

Tom: $0.5 \times 0.4 = 0.20 = 0.2$. **true** / **false**

Why? _____

6 ON YOUR OWN A garden is a rectangle 4.5 m long and 2.4 m wide. What is its area?

_____

The Decimal Grid app · otooly.com/decimal-grid

In **Multiply** mode click a square: the columns are the first factor, the rows the second, and the green overlap is the product.

★ ON YOUR OWN **Exit card.** Work out 0.9×0.6. Is the product greater or smaller than 0.9?

_____