Multiply two decimals

Name _____ Date _____

Multiply the whole-number versions. Restore the decimal places, then check the size.

Q1 1.2 × 0.35

12
× 35
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q2 0.06 × 0.04

6
× 4
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q3 2.50 × 0.4

250
× 4
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q4 2.19 × 0.29

219
× 29
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q5 1.8 × 0.55

18
× 55
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q6 0.04 × 0.02

4
× 2
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q7 6.7 × 2.2

67
× 22
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q8 2.11 × 0.89

211
× 89
_____

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Multiply two decimals

Check the digit calculation and the size of the product separately.

Multiply the whole-number versions. Restore the decimal places, then check the size.

Q1 1.2 × 0.35

$$\begin{array}{r} 12 \\ \times\ 35 \\ \hline 420 \end{array}$$

Places: 1 + 2 = 3

With all places: 0.420

Also written 0.42

0.35 < 1, so the product is less than 1.2.

Q2 0.06 × 0.04

$$\begin{array}{r} 6 \\ \times\ 4 \\ \hline 24 \end{array}$$

Places: 2 + 2 = 4

With all places: 0.0024

0.04 < 1, so the product is less than 0.06.

Q3 2.50 × 0.4

$$\begin{array}{r} 250 \\ \times\ 4 \\ \hline 1000 \end{array}$$

Places: 2 + 1 = 3

With all places: 1.000

Also written 1

0.4 < 1, so the product is less than 2.50.

Q4 2.19 × 0.29

$$\begin{array}{r} 219 \\ \times\ 29 \\ \hline 6351 \end{array}$$

Places: 2 + 2 = 4

With all places: 0.6351

0.29 < 1, so the product is less than 2.19.

Q5 1.8 × 0.55

$$\begin{array}{r} 18 \\ \times\ 55 \\ \hline 990 \end{array}$$

Places: 1 + 2 = 3

With all places: 0.990

Also written 0.99

0.55 < 1, so the product is less than 1.8.

Q6 0.04 × 0.02

$$\begin{array}{r} 4 \\ \times\ 2 \\ \hline 8 \end{array}$$

Places: 2 + 2 = 4

With all places: 0.0008

0.02 < 1, so the product is less than 0.04.

Q7 6.7 × 2.2

$$\begin{array}{r} 67 \\ \times\ 22 \\ \hline 1474 \end{array}$$

Places: 1 + 1 = 2

With all places: 14.74

2.2 > 1, so the product is greater than 6.7.

Q8 2.11 × 0.89

$$\begin{array}{r} 211 \\ \times\ 89 \\ \hline 18779 \end{array}$$

Places: 2 + 2 = 4

With all places: 1.8779

0.89 < 1, so the product is less than 2.11.