Decimals × whole numbers

Name _____ Date _____

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

Q1 4 × 0.08

4
× 8

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q2 6.3 × 8

6 3
× 8

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q3 3 × 0.54

3
× 5 4

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q4 4.2 × 8

4 2
× 8

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q5 7 × 0.06

7
× 6

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q6 6.0 × 6

6 0
× 6

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q7 5 × 0.75

5
× 7 5

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Q8 1.8 × 8

1 8
× 8

Total decimal places: _____

Product: _____

Compare the product with the first factor.

Decimals × whole numbers

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 4 × 0.08

$$\begin{array}{r} 4 \\ \times\ 8 \\ \hline 32 \end{array}$$

Places: 0 + 2 = 2

With all places: 0.32

0.08 < 1, so the product is less than 4.

Q2 6.3 × 8

$$\begin{array}{r} 63 \\ \times\ 8 \\ \hline 504 \end{array}$$

Places: 1 + 0 = 1

With all places: 50.4

8 > 1, so the product is greater than 6.3.

Q3 3 × 0.54

$$\begin{array}{r} 3 \\ \times\ 54 \\ \hline 162 \end{array}$$

Places: 0 + 2 = 2

With all places: 1.62

0.54 < 1, so the product is less than 3.

Q4 4.2 × 8

$$\begin{array}{r} 42 \\ \times\ 8 \\ \hline 336 \end{array}$$

Places: 1 + 0 = 1

With all places: 33.6

8 > 1, so the product is greater than 4.2.

Q5 7 × 0.06

$$\begin{array}{r} 7 \\ \times\ 6 \\ \hline 42 \end{array}$$

Places: 0 + 2 = 2

With all places: 0.42

0.06 < 1, so the product is less than 7.

Q6 6.0 × 6

$$\begin{array}{r} 60 \\ \times\ 6 \\ \hline 360 \end{array}$$

Places: 1 + 0 = 1

With all places: 36.0

Also written 36

6 > 1, so the product is greater than 6.0.

Q7 5 × 0.75

$$\begin{array}{r} 5 \\ \times\ 75 \\ \hline 375 \end{array}$$

Places: 0 + 2 = 2

With all places: 3.75

0.75 < 1, so the product is less than 5.

Q8 1.8 × 8

$$\begin{array}{r} 18 \\ \times\ 8 \\ \hline 144 \end{array}$$

Places: 1 + 0 = 1

With all places: 14.4

8 > 1, so the product is greater than 1.8.