

# Estimate Products of Whole Numbers and Decimals



To estimate a product, round each number. Then use a basic fact and a multiplication pattern to multiply mentally.

Estimate  $27 \times 643$ .

Round each number to its greatest place.

$$\begin{array}{ccc} 27 & \times & 643 \\ \downarrow & & \downarrow \end{array}$$

Write the basic fact. Then, write the same number of zeros in the product as are in both factors.

$$\begin{array}{ccc} 30 & \times & 600 = 18,000 \\ \uparrow & & \uparrow \quad \uparrow \\ 1 \text{ zero} & + & 2 \text{ zeros} \quad 3 \text{ zeros} \end{array}$$

Estimate  $54.3 \times 7.6$ .

$$\begin{array}{ccc} 54.3 & \times & 7.6 \\ \downarrow & & \downarrow \end{array}$$

$$\begin{array}{ccc} 50 & \times & 8 = 400 \\ \uparrow & & \uparrow \\ 1 \text{ zero} & & 1 \text{ zero} \end{array}$$

Estimate each product. Round each factor. Then multiply.

1.  $\begin{array}{ccc} 54 & \times & 68 \\ \downarrow & & \downarrow \\ \underline{\quad} & \times & \underline{\quad} = \underline{\quad} \end{array}$

2.  $\begin{array}{ccc} 61 & \times & 239 \\ \downarrow & & \downarrow \\ \underline{\quad} & \times & \underline{\quad} = \underline{\quad} \end{array}$

3.  $\begin{array}{ccc} 6.97 & \times & 4.3 \\ \downarrow & & \downarrow \\ \underline{\quad} & \times & \underline{\quad} = \underline{\quad} \end{array}$

4.  $\begin{array}{ccc} 36.4 & \times & 2.8 \\ \downarrow & & \downarrow \\ \underline{\quad} & \times & \underline{\quad} = \underline{\quad} \end{array}$

Estimate the product by rounding. Show how you rounded.

5.  $8 \times 674$   
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6.  $9 \times 45.8$   
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7.  $43 \times 104$   
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8.  $1.9 \times 74$   
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9.  $84 \times 13$   
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10.  $21 \times 663$   
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11.  $38 \times 573$   
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12.  $18 \times 26.4$   
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13.  $1.84 \times 4.8$   
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14.  $2.6 \times 9.04$   
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