

Multiply Decimals (4-3)

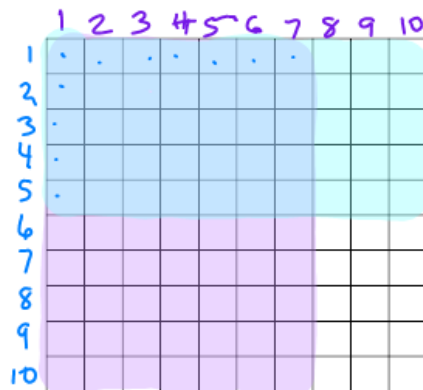
When multiplying decimals, the number of decimal places in the product should be the sum of the decimal places in each factor.

Example:

$$\begin{array}{c}
 + \\
 \text{factors} \quad \quad \text{product} \\
 \downarrow \quad \downarrow \quad \downarrow \\
 3.37 \cdot 6.3 = 20.601 \\
 \underline{2} + \underline{1} = \underline{3}
 \end{array}$$

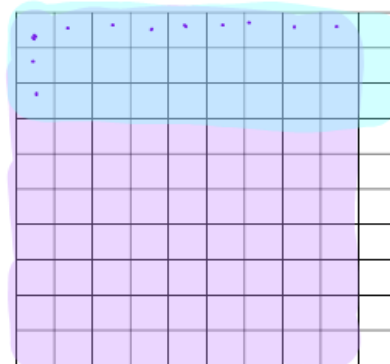
Example 1: Using a model.

Multiply 0.7 by 0.5 using a model.



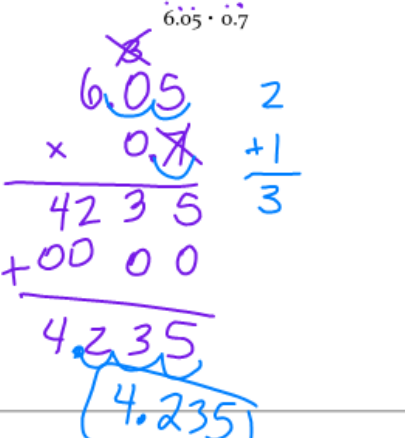
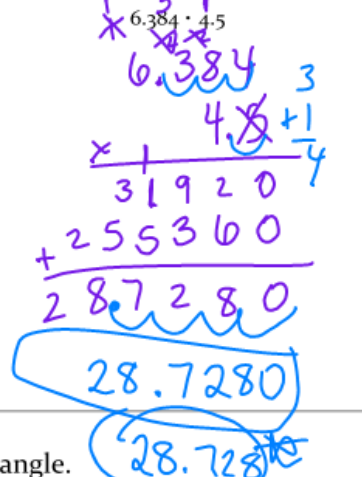
$$\frac{35}{100} \quad \boxed{0.35}$$

Multiply 0.9 by 0.3 using a model.


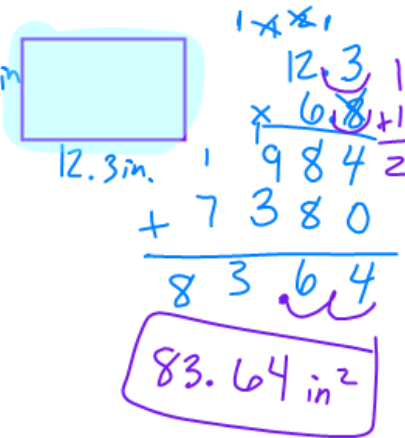
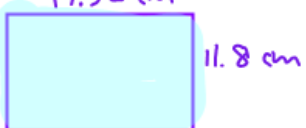


$$\frac{27}{100} \quad \boxed{0.27}$$

Example 3: Multiply the decimals.

I Do	You Do
$6.05 \cdot 0.7$ 	$6.384 \cdot 4.5$ 

Example 4: Find the area of the rectangle.

I Do	You Do
<p>A flag has side lengths of 6.8 in. and 12.3 in.</p>  $6.8 \text{ in} \times 12.3 \text{ in}$ 	<p>A lunch tray has side lengths of 17.32 cm and 11.8 cm.</p>  $17.32 \text{ cm} \times 11.8 \text{ cm}$ 