

STUDY LINK
4•4

Division



Here is an example of the partial-quotients algorithm using an “at least...not more than” strategy.

$\begin{array}{r} 8 \overline{)185} \\ - 80 \\ \hline 105 \\ - 80 \\ \hline 25 \\ - 24 \\ \hline 1 \end{array}$	$\begin{array}{r} 10 \\ 10 \\ 3 \\ 23 \end{array}$	<p>Begin estimating with multiples of 10.</p> <p>How many 8s are in 185? At least 10.</p> <p>The first partial quotient. $10 * 8 = 80$ Subtract. 105 is left to divide.</p> <p>How many 8s are in 105? At least 10.</p> <p>The second partial quotient. $10 * 8 = 80$ Subtract. 25 is left to divide.</p> <p>How many 8s are in 25? At least 3.</p> <p>The third partial quotient. $3 * 8 = 24$ Subtract. 1 is left to divide.</p> <p>Add the partial quotients: $10 + 10 + 3 = 23$</p>
\uparrow	\uparrow	

Remainder **Quotient** **Answer: 23 R1**

Solve.

1. $639 \div 9$

Answer: _____

2. $954 \div 18$

Answer: _____

3. $1,990 / 24$

Answer: _____

4. $972 / 37$

Answer: _____

5. Robert is making a photo album. 6 photos fit on a page. How many pages will he need for 497 photos? _____ pages

Practice

6. $2,746 + 68 =$ _____

Check: _____ - _____ = _____

7. $3,461 - 165 =$ _____

Check: _____ + _____ = _____