

Division Strategies

An airplane travels the same distance every day. It travels 3,822 miles in a week. How far does it travel in one day?

$$3,822 \div 7 = \text{miles daily}$$

Digit-by-digit

$$\begin{array}{r}
 0.546 \\
 7 \overline{) 3822} \\
 \underline{-0} \\
 38 \\
 \underline{-35} \\
 32 \\
 \underline{-28} \\
 42 \\
 \underline{-42} \\
 0
 \end{array}$$

Reasonable?

$$\begin{aligned}
 7 \times 5 &= \\
 7 \times 50 &= \\
 7 \times 500 &=
 \end{aligned}$$

Rectangle Sections

$$\begin{array}{r}
 \times \quad 500 + 40 + 6 = 546 \\
 7 \overline{) 3,822} \\
 \underline{-3,500} \\
 322 \\
 \underline{-280} \\
 42 \\
 \underline{-42} \\
 0
 \end{array}$$

Quotient

Expanded Notation

$$\begin{array}{r}
 6 \\
 + 40 \\
 0500 \\
 \hline
 7 \overline{) 3822} \\
 \underline{-3500} \\
 322 \\
 \underline{-280} \\
 42 \\
 \underline{-42} \\
 0
 \end{array}$$