

DIVISION STRATEGIES

4th Grade Reference Guide

Area Model

Breaking the dividend into parts based on place value inside a box.

Example: $144 \div 4$
[100 | 40 | 4]
 $25 + 10 + 1 = 36$

Partial Quotients

The "Big 7" method. Subtract easy chunks of the divisor.

$$\begin{array}{r} 4 \mid 144 \\ - 100 \text{ (25x)} \\ - 40 \text{ (10x)} \\ - 4 \text{ (1x)} \\ \hline \text{Total: } 36 \end{array}$$

Distributive Property

Breaking the dividend into "friendly numbers" that are easy to divide.

$$\begin{aligned} 144 \div 4 &= \\ (120 \div 4) + (24 \div 4) &= \\ 30 + 6 &= 36 \end{aligned}$$

Standard Algorithm

- Divide
- Multiply
- Subtract
- Bring Down