

DIVISION STRATEGIES

Multiplication facts and fact families.

$$28 \div 7 = ?$$

I know that $7 \times 4 = 28$, so... $28 \div 7 = 4$

Skip Counting

$$30 \div 5 = ?$$

5, 10, 15, 20, 25, 30

That is 6 fives, so... $30 \div 5 = 6$

Repeated Subtraction.

$$18 \div 6 = ?$$

$$18 - 6 = 12 \quad 12 - 6 = 6 \quad 6 - 6 = 0$$

6 could be subtracted 3 times, so... $18 \div 6 = 3$

Make Equal Groups

$$12 \div 4 = ?$$

There are 12 in all and 4 groups.

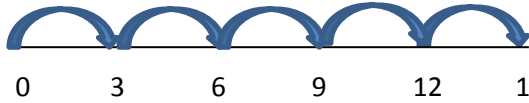


After I passed out the 12.

I can see 3 in each group, so... $12 \div 4 = 3$

Skip Count to find the number of "skips" with a model

$$15 \div 3 = ?$$



(5 skips)

Partial Quotients

$$\begin{array}{r} 7 \overline{)96} \\ \underline{-70} \\ 26 \\ \underline{-14} \\ 12 \\ \underline{-7} \\ 5 \end{array}$$

Use what you know. I know that $10 \times 7 = 70$. 70 is less than 96, so it gives you a good starting point. $96 - 70 = 26$. 26 was larger than 7, so I must continue. I know $7 \times 2 = 14$, so I subtract 14 from the 26 that was left. $26 - 14 = 11$. 11 is larger than 7 so I must continue. I know $7 \times 1 = 7$, so I subtract that from the 11 that was left. $11 - 7 = 4$. 4 is less than 7, so that is my remainder. I add the numbers I listed on the side to multiply 7 by to get my answer. $10 + 2 + 1 = 13$ (Don't forget the remainder!) My answer is $96 \div 7 = 13 \text{ r } 5$ or $13 \frac{5}{7}$.

Division using an Open Array

$$96 \div 3 =$$

The open array provides a tool with which students can reason their way to a solution. I know the whole array would contain 96 squares if each square were drawn. I know one side would be divided into 3 rows (or 3 columns). Using what I know, I want the largest multiplication fact by 3 that is less than 96. Some students may know $3 \times 30 = 90$, most are more comfortable with ten facts.

