

Frequently Asked Questions

Q: What strategies can you use to determine division facts?

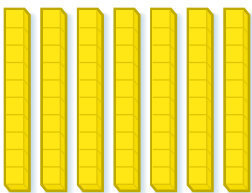
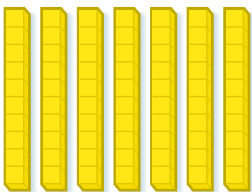
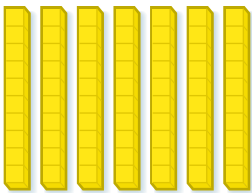
A: You can use a related multiplication fact, skip counting, or halving.

For example, calculate $42 \div 6$.

- You can use $6 \times \square = 42$.
 $6 \times 7 = 42$, so $42 \div 6 = 7$.
- You can use $30 \div 6 = 5$ and count up by 6s:

$$\begin{array}{r} 30 \div 6 = 5 \\ 42 \div 6 = 5 + 2 \\ 42 \div 6 = 7 \end{array} \quad \begin{array}{ccc} & +6 & +6 \\ & \curvearrowright & \curvearrowright \\ 30 & 36 & 42 \end{array}$$

- You can start by halving 42:
 $42 \div 2 = 21$ and $21 \div 3 = 7$, so $42 \div 6 = 7$.



Q: How can you divide tens and hundreds by a one-digit number?

A: You can sometimes use a related fact.

For example, for $210 \div 3$, think of 210 as 21 tens. You know $21 \div 3 = 7$, so 21 tens $\div 3 = 7$ tens, which is 70.

Q: How can you estimate the quotient when a three-digit number is divided by a one-digit number?

A: You can estimate the three-digit number using a nearby number that is easy to divide by the one-digit number.

For example, estimate $278 \div 5 = \square$. 278 is close to 30 tens; 30 is easy to divide by 5. So, estimate 278 as 300.

$300 \div 5$ is 30 tens $\div 5 = 6$ tens.

So, $278 \div 5$ is about 60.

Practice

Lesson 1

1. Sketch an array to calculate $45 \div 5$.
2. Describe two strategies that you could use to calculate $56 \div 7$.
3. Calculate.
 - a) $45 \div 5 = \square$
 - b) $42 \div 6 = \square$
 - c) $63 \div 7 = \square$
 - d) $28 \div 7 = \square$
 - e) $56 \div 8 = \square$
 - f) $72 \div 9 = \square$



Lesson 2

4. Show two strategies that you could use to calculate $64 \div 8$.
5. Andrea had 48 markers. She gave half to Laura. Laura gave half to Ian. Ian gave half to Jen. What one division equation can you use to show how many markers Jen got?

Lesson 3

6. Use base ten blocks to show that $150 \div 5 = 30$. Sketch your model.
7. Solve each equation.
 - a) $120 \div 6 = x$
 - b) $800 \div 4 = s$
 - c) $t = 560 \div 8$
 - d) $490 \div 7 = u$
 - e) $w = 250 \div 5$
 - f) $270 \div 9 = z$

Lesson 4

8. An airplane flew a distance of 845 km in 2 h. About how far did the airplane fly each hour?
9. A farmer put about the same number of chicks in 8 brooders. If the farmer had 625 chicks, about how many chicks were in each brooder?

