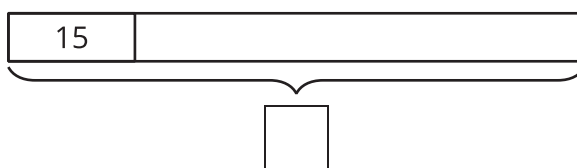


# Lesson 20: How Much in the Group?

- Let's solve more problems involving multiplication and division with fractions.

## Warm-up: Estimation Exploration: What Number Goes in the Blank?

What number goes in the blank?



Record an estimate that is:

too low	about right	too high

## 20.1: Different Equations

1. If  $\frac{1}{3}$  of the class is 9 students, how many students are in the class?

Explain or show your reasoning.



2. Explain how each of these equations represents this situation.

a.  $\frac{1}{3} \times \underline{\hspace{2cm}} = 9$

---



---

b.  $\underline{\hspace{2cm}} \div 3 = 9$

---



---

c.  $3 \times 9 = \underline{\hspace{2cm}}$

---



---

## 20.2: How Big is the Class?

1. Jada's class has 24 students in it. That is  $\frac{1}{4}$  of the total students in the 5th grade. How many students are in the 5th grade? Explain or show your reasoning.

2. Select **all** the equations that represent this situation.

A.  $\frac{1}{4} \times 24 = \underline{\hspace{2cm}}$

B.  $\underline{\hspace{2cm}} \div 4 = 24$

C.  $\frac{1}{4} \div 24 = \underline{\hspace{2cm}}$

D.  $24 = \frac{1}{4} \times \underline{\hspace{2cm}}$

## 20.3: How Many in One Group?

Solve each problem. Show or explain your reasoning.

1. 250 mg of calcium is  $\frac{1}{4}$  of the daily recommended allowance. What is the daily recommended allowance of calcium? Show or explain your reasoning.

2. A rocket took 60 days to get  $\frac{1}{5}$  of the way to Mars. How many days did it take the rocket to get to Mars? Show or explain your reasoning.