Practice & Problem Solving 📝 ⏻
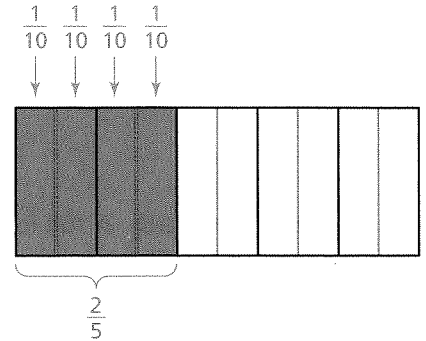
In 12 and 13, complete each division sentence using the models provided.

12. $\frac{1}{3} \div \frac{1}{12} = \boxed{}$

0               $\frac{1}{3}$

13. $\frac{2}{5} \div \frac{1}{10} = \boxed{}$

$\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$

$\frac{2}{5}$
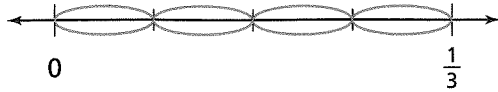
In 14–25, find each quotient.

14. $\frac{2}{3} \div \frac{1}{3}$

15. $\frac{1}{2} \div \frac{1}{16}$

16. $\frac{1}{4} \div \frac{1}{12}$

17. $\frac{6}{7} \div \frac{3}{7}$

18. $\frac{5}{14} \div \frac{4}{7}$

19. $\frac{5}{8} \div \frac{1}{2}$

20. $\frac{7}{12} \div \frac{3}{4}$

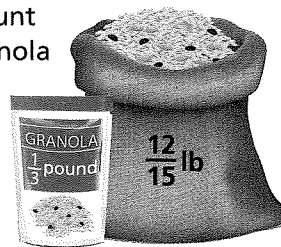**21.** $\frac{2}{7} \div \frac{1}{2}$

22. $\frac{4}{9} \div \frac{2}{3}$

23. $\frac{7}{12} \div \frac{1}{8}$

24. $\frac{3}{10} \div \frac{3}{5}$

25. $\frac{2}{5} \div \frac{1}{8}$

26. Be Precise A large bag contains $\frac{12}{15}$ pound of granola. How many $\frac{1}{3}$-pound bags can be filled with this amount of granola? How much granola is left over?

27. Higher Order Thinking Find $\frac{3}{4} \div \frac{2}{3}$. Then draw a picture and write an explanation describing how to get the answer.

28. The area of a rectangular painting is $\frac{1}{6}$ square yard. The width is $\frac{2}{3}$ yard. What is the length of the painting? Use the formula $A = \ell \times w$.

29. Solve for n in the equation $\frac{13}{16} \div \frac{1}{6} = n$.

30. **Model with Math** A cafeteria uses $\frac{1}{6}$ pound of coffee to fill a large coffee dispenser. The cafeteria has $\frac{2}{3}$ pound of coffee to use.

a. Complete the model at the right to find how many coffee dispensers the cafeteria can fill.

b. Write a division sentence that describes the model and tells how many dispensers can be filled.

$\frac{2}{3}$ {
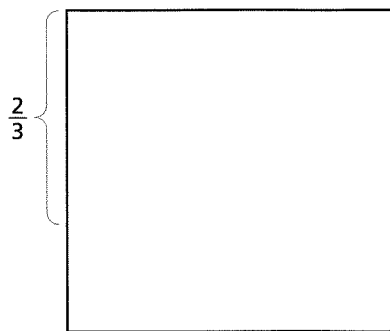
31. **Model with Math** A full load for a small truck to haul is $\frac{2}{3}$ ton of gravel. The truck is hauling $\frac{1}{2}$ ton of gravel.

$\frac{1}{2}$ ton gravel

$\frac{2}{3}$ TON CAPACITY

a. Complete the model below to find how much of a full load the truck is hauling.

b. Write a division sentence that describes the model and tells how much of a full load the truck is hauling.

$\frac{1}{2}$

$\frac{2}{3}$
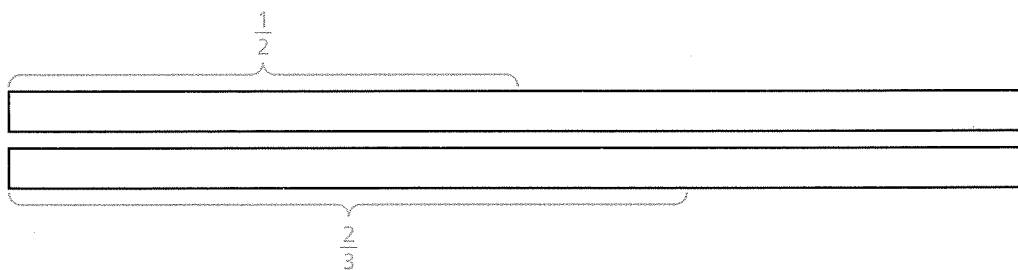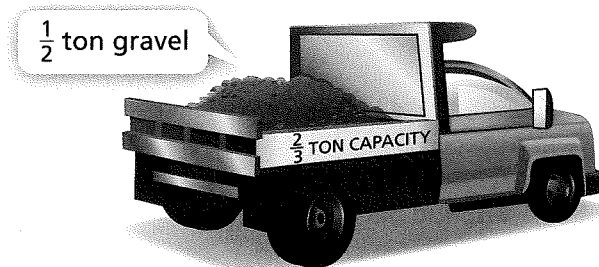
32. **Use Structure** How many $\frac{1}{4}$-inch pieces can be cut from a piece of metal $\frac{5}{8}$ inch long?

33. Write a problem that could be solved by finding $\frac{5}{8} \div \frac{2}{5}$.

Assessment Practice

34. Which division sentence is shown by the model at the right?

$\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$

Ⓐ $\frac{2}{3} \div \frac{1}{9} = 6$

Ⓑ $\frac{1}{9} \div \frac{2}{3} = \frac{1}{6}$

Ⓒ $6 \div \frac{1}{9} = 54$

Ⓓ $6 \div \frac{2}{3} = 9$

$\frac{2}{3}$