

Determine a solution for each problem on this worksheet by showing all work. Write each solution in simplest form.

Pick two columns. Determine a solution to each problem in the columns that you choose.

5. $2\frac{1}{4} \div \frac{3}{4}$

6. $3\frac{4}{5} \div \frac{2}{5}$

7. $8\frac{1}{8} \div \frac{5}{6}$

8. $7\frac{5}{9} \div \frac{4}{7}$

9. $7\frac{1}{2} \div 1\frac{9}{10}$

10. $3\frac{3}{4} \div 2\frac{1}{12}$

11. $7\frac{1}{5} \div 8$

12. $8\frac{4}{7} \div 15$

13. $8\frac{1}{3} \div \frac{2}{3}$

14. $9\frac{1}{6} \div \frac{5}{6}$

15. $13 \div 10\frac{5}{6}$

16. $12 \div 5\frac{9}{11}$

17. $\frac{7}{8} \div 3\frac{1}{16}$

18. $\frac{4}{9} \div 1\frac{7}{15}$

19. $4\frac{5}{16} \div 3\frac{3}{8}$

20. $6\frac{2}{9} \div 5\frac{5}{6}$

22. **DOG FOOD** A bag contains 42 cups of dog food. Your dog eats $2\frac{1}{3}$ cups of dog food each day. How many days does the bag of dog food last?

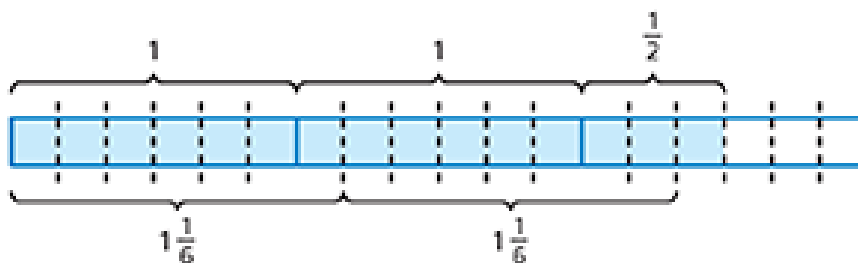
23. **HAMBURGERS** How many $\frac{1}{4}$ -pound hamburgers can you make from $3\frac{1}{2}$ pounds of ground beef?

24. **BOOKS** How many $1\frac{3}{5}$ -inch-thick books can fit on a $14\frac{1}{2}$ -inch-long bookshelf?

25. **LOGIC** Alexei uses the model shown to state that

$$2\frac{1}{2} \div 1\frac{1}{6} = 2\frac{1}{6}.$$

Is Alexei correct? Justify your answer using the model.



Solve three problems total using the following requirements.

- Choose one problem that contains addition.
- Choose one problem that contains subtraction.
- Choose one problem that contains multiplication.

26. $3 \div 1\frac{1}{5} + \frac{1}{2}$

27. $4\frac{2}{3} - 1\frac{1}{3} \div 2$

28. $\frac{2}{5} + 2\frac{1}{6} \div \frac{5}{6}$

29. $5\frac{5}{6} \div 3\frac{3}{4} - \frac{2}{9}$

30. $6\frac{1}{2} - \frac{7}{8} \div 5\frac{11}{16}$

31. $9\frac{1}{6} \div 5 + 3\frac{1}{3}$

32. $3\frac{3}{5} + 4\frac{4}{15} \div \frac{4}{9}$

33. $\frac{3}{5} \times \frac{7}{12} \div 2\frac{7}{10}$

34. $4\frac{3}{8} \div \frac{3}{4} \times \frac{4}{7}$

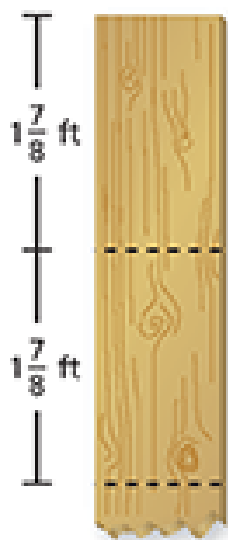
35. $1\frac{9}{11} \times 4\frac{7}{12} \div \frac{2}{3}$

36. $3\frac{4}{15} \div \left(8 \times 6\frac{3}{10}\right)$

37. $2\frac{5}{14} \div \left(2\frac{5}{8} \times 1\frac{3}{7}\right)$

39. **RAMPS** You make skateboard ramps by cutting pieces from a board that is $12\frac{1}{2}$ feet long.

- Estimate how many ramps you can cut from the board. Is your estimate reasonable? Explain.
- How many ramps can you cut from the board? How much wood is left over?



Extra Credit

TRAIL MIX You have 12 cups of granola and $8\frac{1}{2}$ cups of peanuts to make trail mix. What is the greatest number of full batches of trail mix you can make? Explain how you found your answer.

Trail Mix

$2\frac{3}{4}$ cups granola

$1\frac{1}{3}$ cups peanuts

Solve the expression for your leveled group. Use the order of operation to solve.

Level 1:

$$a = 3\frac{2}{5} \quad b = \frac{1}{2} \quad c = 4\frac{3}{8}$$

Simplify the expression below using the values given above.

$$a - b \div c$$

Level 2:

Simplify the expression below.

$$1\frac{2}{64} \div \left(\frac{3}{4}\right)^2$$

Level 3:

Simplify the expression below.

$$\left(2\frac{1}{2}\right)^3 \div \left(\frac{10}{3}\right)^2 + \left(5\frac{2}{3} - 2\frac{5}{6}\right)$$