

Teacher Note:

- For additional practice, students may complete Targeted Practice 86.

• Multiplying Fractions and Whole Numbers

New Concept

- To multiply a fraction and a whole number:
 1. Convert the whole number to a fraction. (Write the whole number **over 1**.)
 2. Multiply the fractions.
 3. Simplify the answer.

Example

What number is $\frac{2}{3}$ of 4?

$\frac{2}{3}$ of 4

↓ ↓ ↓

$$\frac{2}{3} \times \frac{4}{1} = \frac{8}{3} = 2\frac{2}{3}$$

Lesson Practice

Multiply. **Simplify answers** when possible. Reverse the order of factors to check your answer.

a. $\frac{1}{3} \times 4$

↓ ↓

$$\frac{1}{3} \times \text{---} =$$

b. $\frac{3}{5} \times 2$

↓ ↓

$$\frac{3}{5} \times \text{---} =$$

c. $\frac{2}{3} \times 2$

↓ ↓

$$\frac{2}{3} \times \text{---} =$$

d. What number is $\frac{1}{5}$ of 4?

↓ ↓

$$\frac{1}{5} \times \text{---} =$$

e. What number is $\frac{1}{6}$ of 5?

↓ ↓

$$\frac{1}{6} \times \text{---} =$$

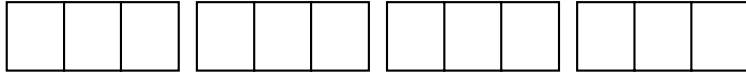
f. What number is $\frac{2}{3}$ of 5?

↓ ↓

$$\frac{2}{3} \times \text{---} =$$

Lesson Practice, continued

g. Shade to show $\frac{1}{3}$ of 4.



Written Practice

page 561

1. Draw two **horizontal parallel** segments.
 Make the **lower segment longer**.
 Connect the ends.

Use work area.

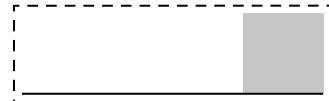
2. **Estimate** the difference.

6970 →

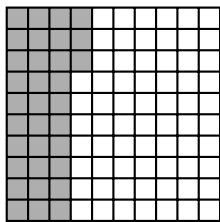
3047 → _____

3. The sum of six and four is ten.

4. L $\frac{1}{mL} = \frac{2}{?}$



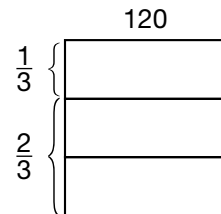
5. fraction, decimal, and percent shaded



6. a. $\frac{1}{3}$ of 120

b. $\frac{2}{3}$ of 120

is of $\frac{?}{120}$

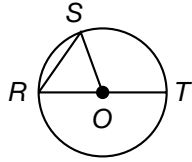


a. _____

b. _____

7. Which segment names a **diameter** of this circle?

- A \overline{RS} B \overline{RT}
 C \overline{OS} D \overline{OT}

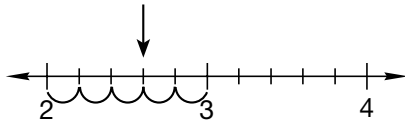


8. least to greatest
 Compare each to $\frac{1}{2}$.

$$\frac{9}{18}, \frac{8}{7}, \frac{7}{16}, \frac{6}{6}, \frac{5}{8}$$

_____, _____, _____, _____, _____

9.



10. $\frac{2}{3} \times \text{---} =$

Convert.

11. $\frac{3}{4}$ of $\text{---} =$

Convert.

12. $3 - \left(2\frac{3}{5} - 1\frac{1}{5}\right) =$

13. 4.7
 .
 + .

14. 301.4
 - 143.5

15.
$$\begin{array}{r} 476 \\ \times 890 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 4 \overline{)348} \\ \hline \end{array}$$

--	--

17. Cancel matching final zeros.

$$40 \overline{)3480}$$

18. $\$42.36 \div 6 =$

19. $22^2 =$

20. a. List the factors of the **smaller** number (60).

Cross out those that are **not** factors of the **larger** number (100).

Circle the GCF.

b. Divide **both** by the GCF.

$$\frac{60}{100} \div \frac{1}{1} =$$

a. _____

b. _____

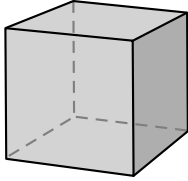
21. $\frac{3}{4} = \frac{\quad}{12}$

$\frac{2}{3} = \frac{\quad}{12}$

22. Count the $\frac{3}{4}$ s.

Use work area.

23. a. Shape?
b. How many vertices?

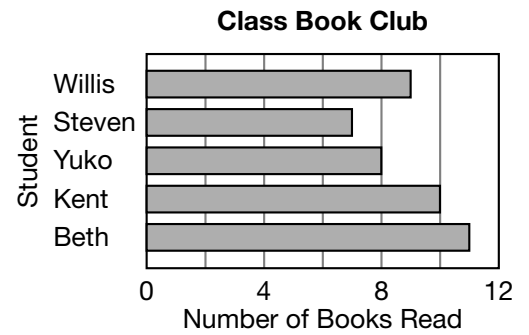


a. _____
b. _____

24. a. _____ 12 goal
_____ Steven
_____ more

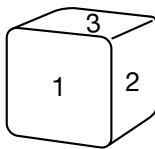
b. books pages $\frac{1}{180} = ?$

- c. median



a. _____ b. _____ c. _____

25. What is the probability of rolling a number **under** 5? Reduce.



26. 1 quart = $\frac{1}{4}$ gallon

1 quart = _____ percent of a gallon

27. 1 quart ○ 1 liter

See page 1 in the *Student Reference Guide*.

28. $1\frac{1}{2}$ morning
 $+ 2\frac{1}{2}$ evening

 one day

Use work area.

Use work area.

29.



a. Draw the next term.

b. Which transformation describes the change from term to term?

A translation

B rotation

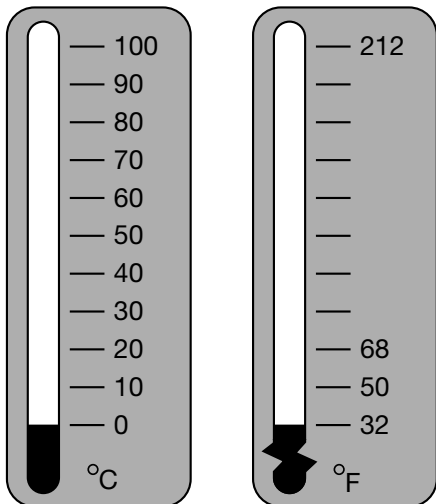
C reflection

D slide

a. Use work area.

b.

30. A 10° change on the Celsius scale is an 18° change on the Fahrenheit scale.



Label the blank tick marks.

Use work area.