2.2 Exercises



- 1. OPEN-ENDED Write a fraction and its reciprocal.
- 2. WHICH ONE DOESN'T BELONG? Which of the following does not belong with the other three? Explain your reasoning.

$$\frac{1}{3}$$

$$\frac{1}{6}$$

$$\frac{2}{9}$$

$$\frac{1}{8}$$

MATCHING Match the expression with its value.

3.
$$\frac{2}{5} \div \frac{8}{15}$$

4.
$$\frac{8}{15} \div \frac{2}{5}$$

3.
$$\frac{2}{5} \div \frac{8}{15}$$
 4. $\frac{8}{15} \div \frac{2}{5}$ **5.** $\frac{2}{15} \div \frac{8}{5}$ **6.** $\frac{8}{5} \div \frac{2}{15}$

6.
$$\frac{8}{5} \div \frac{2}{15}$$

A.
$$\frac{1}{12}$$

B.
$$\frac{3}{4}$$

D.
$$1\frac{1}{3}$$

Divide. Write the answer in simplest form.

24.
$$\frac{4}{15} \div \frac{10}{13}$$

26.
$$10 \div \frac{5}{12}$$

ERROR ANALYSIS Describe and correct the error in finding the quotient.

28.

8.
$$\frac{2}{5} \div \frac{8}{9} = \frac{5}{2} \times \frac{8}{9}$$
$$= \frac{5 \times \cancel{8}}{\cancel{2} \times 9}^{4}$$
$$= \frac{20}{9}$$

Determine whether the numbers are reciprocals. If not, write the reciprocal of each number.

32. 9,
$$\frac{1}{9}$$

34.
$$\frac{5}{6}$$
, $\frac{15}{18}$

Complete the statement.

36.
$$\frac{5}{12} \times \boxed{} = 1$$

56. PROBLEM SOLVING You have 6 pints of glaze. It takes $\frac{7}{8}$ of a pint to glaze a bowl and $\frac{9}{16}$ of a pint to glaze a plate.



a. How many bowls could you glaze? How many plates could you glaze?

Bowls: _____ Plates: _____

b. You want to glaze 5 bowls, and then use the rest for plates. How many plates can you glaze? How much glaze will be left over?

Plates: ____ Glaze left over: ____

c. How many of each object could you glaze so that there is no glaze left over? Explain how you found your answer.

Bowls: _____ Plates: ____ Explain: