

# Grade 7

### Topic: Multiplying and Dividing Rational Numbers

#### Instructions

Solve the following problems. Show all work clearly and check your solutions.

### **Practice Problems**

1. Multiply the following rational numbers.

(i) 
$$\frac{3}{4} \times \frac{5}{6}$$

(iv) 
$$\frac{6}{7} \times (-\frac{2}{5})$$

(ii) 
$$-\frac{7}{8} \times \frac{2}{3}$$

$$(v) -\frac{9}{10} \times \frac{1}{2}$$

(iii) 
$$\frac{-5}{9} \times \frac{-3}{4}$$

(vi) 
$$\frac{-2}{3} \times (-\frac{4}{5})$$

2. Divide the following rational numbers.

(i) 
$$\frac{3}{4} \div \frac{2}{5}$$

(iv) 
$$\frac{9}{10} \div \frac{-3}{5}$$

(ii) 
$$-\frac{7}{8} \div \frac{1}{4}$$

(v) 
$$-\frac{8}{9} \div \frac{4}{7}$$

(iii) 
$$\frac{-5}{6} \div (-\frac{2}{3})$$

(vi) 
$$\frac{-3}{5} \div \left(-\frac{6}{11}\right)$$

3. Word Problems.

- (i) A recipe calls for  $\frac{3}{4}$  cup of sugar. You are making  $\frac{2}{3}$  of the recipe. How much sugar do you need?
- (ii) A rope is  $\frac{5}{6}$  meters long. You cut it into pieces each  $\frac{1}{4}$  meter long. How many pieces do you get?
- (iii) A car travels  $\frac{7}{8}$  of a kilometer per minute. How far will it travel in  $\frac{3}{4}$  minutes?

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4. Mixed Review.

(i) 
$$-2 \times (-5)$$

- (ii)  $3.5 \div (-0.7)$
- (iii)  $-6 \times 1.2$
- (iv)  $-7 \div (-0.5)$

# Multiple-Choice Questions

- 1.  $\frac{5}{6} \times \frac{2}{3} =$ 
  - A.  $\frac{10}{18}$

  - C.  $\frac{10}{9}$
  - D.  $\frac{7}{9}$
- $2. -2 \div 4 =$ 
  - A. 2
  - В. -2
  - C. -0.5
  - D. 0.5
- 3. Which is the correct result?  $-4 \times (-\frac{1}{2})$ 
  - A. -2
  - B. 2
  - C. 4
  - D. -4
- 4.  $\frac{-9}{10} \div \frac{3}{5} =$ 

  - A.  $\frac{-3}{2}$ B.  $\frac{-15}{10}$ C.  $\frac{-6}{5}$ D.  $\frac{-9}{50}$

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