

## 5th Grade Math- Number & Operations—Fractions Practice Test

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

1.  $\frac{4}{7} + \frac{4}{6}$ 
  - a.  $\frac{8}{42}$
  - b.  $\frac{8}{13}$
  - c.  $\frac{8}{12}$
  - d.  $\frac{26}{21}$
2.  $\frac{5}{4} - \frac{4}{7}$ 
  - a.  $\frac{1}{3}$
  - b.  $\frac{19}{28}$
  - c.  $\frac{18}{29}$
  - d.  $\frac{18}{29}$
3.  $\frac{8}{2} + \frac{3}{2}$ 
  - a.  $\frac{11}{4}$
  - b.  $\frac{5}{1}$
  - c.  $\frac{24}{4}$
  - d.  $\frac{11}{2}$
4.  $\frac{5}{3} - \frac{3}{4}$ 
  - a.  $\frac{11}{12}$
  - b. 2
  - c.  $\frac{2}{1}$
  - d.  $\frac{9}{12}$
5.  $\frac{5}{4} + \frac{8}{5}$ 
  - a.  $\frac{13}{9}$
  - b.  $\frac{13}{20}$
  - c.  $\frac{57}{20}$
  - d.  $\frac{32}{20}$
6.  $\frac{5}{4} - \frac{4}{8}$ 
  - a.  $\frac{1}{4}$
  - b.  $\frac{3}{4}$
  - c.  $\frac{1}{2}$
  - d.  $\frac{1}{16}$
7.  $\frac{7}{6} + \frac{3}{2}$ 
  - a.  $\frac{4}{6}$
  - b.  $\frac{9}{7}$
  - c.  $\frac{8}{3}$
  - d.  $\frac{10}{6}$

8.  $\frac{8}{8} - \frac{8}{8}$

- a. 0  
b.  $\frac{16}{16}$   
c. 1  
d.  $\frac{4}{4}$

9.  $\frac{4}{7} + \frac{3}{8}$

- a.  $\frac{7}{15}$   
b.  $\frac{52}{54}$   
c.  $\frac{12}{54}$   
d.  $\frac{53}{56}$

10.  $\frac{6}{3} - \frac{4}{2}$

- a. 0  
b.  $\frac{2}{1}$   
c. 2  
d.  $\frac{2}{6}$

Answer 1: D

$$\frac{4}{7} + \frac{4}{6}$$

Reduce fractions that can be reduced:  $\frac{4}{6}$  can be reduced by 2 to become  $\frac{2}{3}$ .

$$\frac{4}{7} + \frac{2}{3}$$

To add fractions, the denominators must be equal. The denominators can be made equal by finding the least common denominator (LCD). In this case, the LCD is 21. Next, multiply each fraction by a factor of 1 that will create the LCD in each of the fractions.

$$\frac{2}{3} \cdot \frac{7}{7} + \frac{4}{7} \cdot \frac{3}{3}$$

Multiply to produce a denominator of 21 in each expression.

$$\frac{14}{21} + \frac{12}{21}$$

Combine the numerators of both fractions so that both have common denominators.

Add 12 to 14 to get 26.

$$\frac{26}{21}$$

Answer 2: B

$$\frac{5}{4} - \frac{4}{7}$$

To add fractions, the denominators must be equal. The denominators can be made equal by finding the least common denominator (LCD). In this case, the LCD is 28. Next, multiply each fraction by a factor of 1 that will create the LCD in each of the fractions.

$$-\frac{4}{7} \cdot \frac{4}{4} + \frac{5}{4} \cdot \frac{7}{7}$$

Complete the multiplication to produce a denominator of 28 in each expression.

$$-\frac{16}{28} + \frac{35}{28}$$

Combine the numerators of all fractions that have common denominators.

$$\frac{-16+35}{28}$$

Add 35 to -16 to get 19.

$$\frac{19}{28}$$

Answer 3: D

Answer 4: A

Answer 5: C

Answer 6: B

Answer 7: C

Answer 8: A

Answer 9: D

Answer 10: A