



Module Test

A

Module 6



Evaluate each expression.

1. $\frac{5}{6} - \frac{1}{6}$

$\frac{2}{3}$

2. $\frac{5}{12} + \frac{11}{12}$

$1\frac{1}{3}$

3. $\frac{3}{4} - \frac{5}{14}$

$\frac{11}{28}$

4. $\frac{1}{4} + \frac{2}{9}$

$\frac{17}{36}$

5. $4\frac{2}{3} - 1\frac{2}{9}$

$3\frac{4}{9}$

6. $5\frac{1}{6} + 9\frac{7}{10}$

$14\frac{13}{15}$

7. A running race is 15 miles long. Carla has run $8\frac{3}{4}$ miles so far. How much farther does she have to run to finish the race?

$6\frac{1}{4}$ miles

Circle the correct answer for each problem.

8. What is the reciprocal of $\frac{1}{3}$?

a. -3

b. $-\frac{1}{3}$

c. 0

d. 3

3

9. Which subtraction problem would require regrouping?

a. $3\frac{5}{16} - \frac{3}{4}$

b. $4\frac{3}{8} - 4\frac{1}{8}$

c. $9\frac{1}{2} - 5\frac{3}{8}$

d. $2\frac{6}{11} - \frac{1}{11}$

$3\frac{5}{16} - \frac{3}{4}$

10. What is the least common denominator of $\frac{2}{9}$ and $\frac{4}{15}$?

a. 15

b. 45

c. 90

d. 135

45

11. Which has a different answer than the others?

a. $1 \div \frac{8}{3}$

b. $\frac{3}{2} \times \frac{1}{4}$

c. $\frac{3}{4} \div 2$

d. $\frac{1}{16} \div 6$

$\frac{1}{16} \div 6$

Evaluate.

12. $\frac{3}{4} \times \frac{1}{5}$

$\frac{3}{20}$

13. $\frac{2}{15} \times \frac{5}{6}$

$\frac{1}{9}$

14. $12 \div 1\frac{2}{3}$

$7\frac{1}{5}$

15. $2\frac{1}{2} \times 5\frac{2}{5}$

$13\frac{1}{2}$

16. $6\frac{3}{4} \times \frac{8}{9}$

6

17. $5\frac{1}{3} \div 3\frac{5}{6}$

$1\frac{9}{23}$

18. Six friends evenly divided $2\frac{1}{4}$ pizzas. They were still hungry after that, so they shared one more whole pizza. How much pizza did each friend eat in all?

$\frac{13}{24}$ of a pizza

19. Show how to use the common denominator method to find $\frac{5}{6} \div \frac{5}{8}$.

Write equivalent fractions with a common denominator of 24 and divide the numerators.

$$\frac{5}{6} \div \frac{5}{8} = \frac{20}{24} \div \frac{15}{24}$$

$$20 \div 15 = 1\frac{5}{15} = 1\frac{1}{3}$$

20. Use $1\frac{4}{5} + 3\frac{7}{10}$ to explain why the whole number part of the sum of two mixed numbers is not always the sum of the whole number parts in the addends.

The sum of the whole number parts in the addends is four because $1 + 3 = 4$. However, the whole number part in the sum is five because the sum of the fraction parts is an improper fraction. When the improper fraction is written as a mixed number, there is another whole.

$$\begin{aligned} 1\frac{4}{5} + 3\frac{7}{10} &= 1\frac{8}{10} + 3\frac{7}{10} = 4\frac{15}{10} \\ &= 4 + \frac{15}{10} = 4 + 1\frac{5}{10} = 4 + 1\frac{1}{2} = 5\frac{1}{2} \end{aligned}$$

