Exercise 8 Adding Like Fractions and Mixed Numbers

Like fractions have the same denominator. Add like fractions by adding the numerators. Use the same denominator.

Add. $\frac{5}{8} + \frac{1}{8}$

Add the numerators. $\frac{5+1}{8} = \frac{6}{8}$

Write the common denominator.

Reduce to lowest terms. $\frac{6}{8} = \frac{3}{4}$

Add mixed numbers the same way. Regroup, if needed.

Add. $3\frac{4}{5} + 4\frac{2}{5}$

Add the whole numbers. $3\frac{4}{5} + 4\frac{2}{5} = 7\frac{6}{5}$

Add the fractions.

Regroup the improper fraction. $7 + 1\frac{1}{5} = 8\frac{1}{5}$

Add the whole numbers.

Add the fractions. Reduce your answer to lowest terms, if possible.

1. $\frac{1}{2} + \frac{1}{2} =$ **2.** $\frac{5}{8} + \frac{2}{8} =$ **3.** $\frac{1}{4} + \frac{2}{4} =$ **4.** $\frac{3}{10} + \frac{8}{10} =$

5. $\frac{5}{6} + \frac{2}{6} =$ **6.** $\frac{4}{5} + \frac{1}{5} =$ **7.** $\frac{2}{3} + \frac{2}{3} =$ **8.** $\frac{15}{24} + \frac{22}{24} =$

Add the mixed numbers. Reduce your answer to lowest terms, if possible.

9. $6\frac{3}{4} + 1\frac{1}{4} =$ **10.** $9\frac{5}{6} + 2\frac{2}{6} =$ **11.** $1\frac{2}{5} + 4\frac{1}{5} =$ **12.** $6\frac{2}{10} + 5\frac{7}{10} =$

13. $10\frac{7}{8} + 5\frac{4}{8}$ **14.** $13\frac{2}{3} + 34\frac{1}{3}$ **15.** $18\frac{6}{10} + 40\frac{1}{10}$ **16.** $40\frac{5}{15} + 67\frac{3}{15}$ **17.** $125\frac{3}{5} + 25\frac{2}{5}$

Solve.

18. A dressmaker is making two costumes for a play. She needs to buy fringe. One costume requires $\frac{6}{8}$ yard of fringe. The other needs $\frac{4}{8}$ yard of fringe.

How much fringe should she buy? _____

Directions: Choose the one best answer to each item. Circle the number of the correct answer.

19. A jeweler is making a beaded necklace and a matching bracelet. She needs $1\frac{2}{3}$ ft of string for the necklace and $\frac{2}{3}$ ft of string for the bracelet. How much total string does she need?

(1) $2\frac{2}{3}$ ft
(2) $\frac{4}{3}$ ft
(3) $2\frac{1}{3}$ ft
(4) 3 ft
(5) $\frac{5}{3}$ ft

20. Dominic ran $3\frac{1}{2}$ mi on Monday. On Tuesday he ran 4 mi. How many total miles did Dominic run in the two days?

(1) 8 mi
(2) $\frac{8}{2}$ mi
(3) $7\frac{1}{2}$ mi
(4) $1\frac{1}{2}$ mi
(5) 4 mi

21. Ms. Burg noticed that she needed oil for three science experiments. She needed $3\frac{1}{4}$ c (cups), $2\frac{3}{4}$ c, and $1\frac{1}{4}$ c. How much oil will she need for the three experiments?

(1) 6 c
(2) $6\frac{6}{4}$ c
(3) $6\frac{1}{4}$ c
(4) $7\frac{1}{4}$ c
(5) 7 c

22. A printer needs $\frac{5}{8}$ in. margin on each side of his paper. What is the total space needed for the two margins?

(1) $1\frac{1}{4}$ in.
(2) $\frac{10}{16}$ in.
(3) $1\frac{3}{8}$ in.
(4) $\frac{25}{8}$ in.
(5) $1\frac{1}{3}$ in.

23. The Terrence family went on two day-trips during the summer. They traveled $35\frac{1}{2}$ mi on the first trip and $59\frac{1}{2}$ mi on the second trip. How many total miles did the family travel for the two trips?

(1) $95\frac{2}{2}$ mi
(2) 24 mi
(3) $94\frac{2}{4}$ mi
(4) 95 mi
(5) none of the above

24. The child grew $\frac{1}{4}$ in. in January, $\frac{3}{4}$ in. in February, $\frac{1}{4}$ in. in March, and $\frac{2}{4}$ in. in April. What was the total amount he grew during February, March, and April?

(1) $1\frac{3}{4}$ in.
(2) $1\frac{1}{4}$ in.
(3) $1\frac{1}{2}$ in.
(4) $2\frac{3}{4}$ in.
(5) 8 in.

25. The chef needs $\frac{3}{4}$ tbs (tablespoon) of cinnamon for one recipe and $1\frac{1}{4}$ tbs for the other. How many tablespoons of cinnamon does he need for both recipes?

(1) 2 tbs
(2) $1\frac{3}{4}$ tbs
(3) $1\frac{1}{4}$ tbs
(4) $\frac{3}{4}$ tbs
(5) 3 tbs