Mixed Numbers

Change a mixed number to an improper fraction by multiplying the whole number by the denominator and adding the number in the numerator.

Change $4\frac{2}{3}$ to an improper fraction.

Multiply the denominator by the whole number.	$3 \times 4 = 12$
Add the product and numerator.	$12 + 2 = 14$
Write the sum over the denominator.	$\frac{14}{3}$

Rewrite each mixed number as an improper fraction.

1. $6\frac{1}{2}$

2. $5\frac{5}{8}$

3. $8\frac{1}{2}$

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

5. $7\frac{3}{4}$

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

7. $9\frac{1}{2}$

8. $10\frac{3}{5}$

9. $17\frac{2}{3}$

10. $13\frac{3}{10}$

11. $4\frac{7}{12}$

12. $15\frac{3}{4}$

13. $12\frac{3}{5}$

14. $11\frac{2}{3}$

15. $20\frac{1}{8}$

Are the mixed numbers and improper fractions equivalent? Write *yes* or *no*.

16. $6\frac{3}{4}$ and $\frac{27}{4}$ _____

17. $2\frac{1}{2}$ and $\frac{4}{2}$ _____

18. $5\frac{1}{5}$ and $\frac{26}{5}$ _____

19. $3\frac{9}{10}$ and $\frac{22}{10}$ _____

20. $10\frac{1}{6}$ and $\frac{60}{6}$ _____

21. $5\frac{7}{8}$ and $\frac{47}{8}$ _____

Solve.

22. Henry is a chef at a restaurant. He needs $6\frac{2}{3}$ bars of chocolate for a special dessert.

    How many thirds is this? _____

23. Butter comes in $\frac{1}{4}$-lb sticks. A cake recipe requires $1\frac{3}{4}$ lb of butter. How many sticks will a baker need?

    (1) 7
    (2) 3
    (3) 4
    (4) 1
    (5) 8

24. Alexa bought $2\frac{3}{8}$ yards of fabric to make costumes for a play. She needs to cut the fabric into pieces $\frac{1}{8}$ yard long each. How many $\frac{1}{8}$-yard pieces will she cut?

    (1) 2
    (2) 8
    (3) 3
    (4) 11
    (5) 19

25. A local supermarket has cherries on sale. Mrs. Hernandez wants to buy them for snacking. She bought $5\frac{3}{8}$ pounds of cherries. How many eighths is this?

    (1) $\frac{43}{8}$
    (2) $\frac{5}{8}$
    (3) $\frac{3}{8}$
    (4) $\frac{8}{8}$
    (5) $\frac{16}{8}$

26. In her Sports Club trials for the standing broad jump, Karina jumped $1\frac{2}{3}$ yd. How many thirds of a yard is this?

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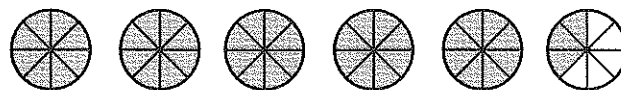   (5) $\frac{7}{3}$ yd

27. A carpenter cut $3\frac{3}{4}$ feet off a piece of lumber. How many fourths is this?

    (1) $\frac{3}{4}$
    (2) $\frac{12}{4}$
    (3) $\frac{9}{4}$
    (4) $\frac{15}{4}$
    (5) $\frac{1}{4}$

28. After cutting the lumber, the carpenter has $9\frac{7}{16}$ inches left over. How many sixteenths is this?

    (1) $\frac{9}{16}$
    (2) $\frac{10}{16}$
    (3) $\frac{74}{16}$
    (4) $\frac{148}{16}$
    (5) $\frac{151}{16}$

Items 29 and 30 refer to the following figure.

29. What is the mixed number for the shaded portion of these circles?

    (1) $5\frac{3}{8}$
    (2) $40\frac{3}{8}$
    (3) $3\frac{5}{8}$
    (4) $48\frac{5}{8}$
    (5) $48\frac{3}{8}$

30. What improper fraction represents the mixed number shown by the figure?

    (1) $\frac{5}{8}$
    (2) $\frac{43}{8}$
    (3) $\frac{40}{8}$
    (4) $\frac{8}{40}$
    (5) $\frac{48}{8}$