Exercise 15

Multiplying Mixed Numbers

Multiply mixed numbers by rewriting the mixed numbers as improper fractions. Then, multiply the numerators and denominators.

Multiply. $2\frac{1}{7} \times 2\frac{2}{3}$

Rewrite as improper fractions. $\frac{15}{7} \times \frac{8}{3}$

Cancel if possible. Multiply. $\frac{\overset{5}{\cancel{15}}}{7} \times \frac{8}{\underset{1}{\cancel{3}}} = \frac{40}{7}$

Write the improper fraction as a mixed number. $\frac{40}{7} = 5\frac{5}{7}$

Multiply. Reduce your answer to lowest terms.

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

2. $6\frac{3}{7} \times 7\frac{2}{3} =$

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

4. $1\frac{2}{3} \times 2\frac{8}{10} =$

5. $4\frac{2}{6} \times 10\frac{1}{2} =$

6. $2\frac{2}{5} \times 5\frac{4}{5} =$

7. $2\frac{2}{3} \times 4\frac{2}{3} =$

8. $3\frac{6}{7} \times 8\frac{3}{4} =$

9. $1\frac{3}{4} \times 9\frac{1}{3} =$

10. $2\frac{7}{8} \times 5\frac{2}{3} =$

11. $16\frac{1}{3} \times 4\frac{4}{5} =$

12. $2\frac{1}{6} \times 3\frac{3}{5} =$

13. $4\frac{1}{5} \times 4\frac{2}{3} =$

14. $6\frac{8}{9} \times 3\frac{4}{6} =$

15. $1\frac{3}{6} \times 5\frac{3}{10} =$

16. $5\frac{1}{2} \times 6\frac{1}{3} =$

17. $6\frac{2}{3} \times 8\frac{2}{3} =$

18. $10\frac{1}{2} \times 5 =$

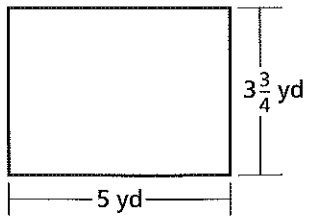
19. $12\frac{1}{3} \times 4\frac{1}{2} =$

20. $15\frac{2}{3} \times 4\frac{1}{2} =$

21. $25\frac{1}{2} \times 2\frac{2}{3} =$

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

Items 22 and 23 refer to the following figure.



22. The rectangle shows the dimensions of Pedro's garden. What is the area of Pedro's garden? (Area = $l \times w$)

(1) 75 square yards
(2) 16 square yards
(3) $18\frac{3}{4}$ square yards
(4) 20 square yards
(5) 12 square yards

23. If Pedro wants to use $\frac{1}{2}$ of his garden's area for flowers, how many square yards of the garden will have flowers?

(1) $9\frac{3}{8}$ square yards
(2) 9 square yards
(3) 9 yards
(4) $9\frac{3}{8}$ yards
(5) $8\frac{3}{8}$ square yards

24. Rosie wants to find the area of a square tabletop. Each side is $20\frac{1}{2}$ inches. What is the area of the tabletop?

(1) 41 square inches
(2) $420\frac{1}{4}$ square inches
(3) 451 square inches
(4) $112\frac{3}{4}$ square inches
(5) 42 square inches

25. Sam is installing floor tile. He computes the area of a room by multiplying the width of $18\frac{1}{2}$ feet by the length of $9\frac{1}{2}$ feet. What is the area of the room?

(1) $174\frac{3}{4}$ square feet
(2) $175\frac{3}{4}$ square feet
(3) 37 square feet
(4) 148 square feet
(5) 19 square feet

26. A truck uses $2\frac{1}{2}$ gallons of gas per hour. How much gas would this truck use in $1\frac{3}{4}$ hours?

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

27. A merchant in Venice bought roses wholesale for $1\frac{1}{2}$ lire each. He sold them for $2\frac{1}{2}$ times the price. What is the price in lire for one rose?

(1) $3\frac{1}{2}$ lire
(2) 3 lire
(3) $3\frac{3}{4}$ lire
(4) $4\frac{1}{4}$ lire
(5) none of the above

28. For customers with large orders, the merchant sells them for only $1\frac{1}{2}$ times the wholesale price. How much does he charge for a discounted rose?

(1) $1\frac{1}{2}$ lire
(2) $2\frac{1}{4}$ lire
(3) $2\frac{1}{2}$ lire
(4) 3 lire
(5) none of the above