

Practice Worksheet: Multiplication of Fractions

Section A: Multiple Choice

1. What is the product of $\frac{1}{2}$ and 3?

- A) $\frac{1}{6}$
- B) $\frac{1}{3}$
- C) $\frac{3}{2}$
- D) $\frac{2}{3}$

2. What is the product of $\frac{2}{3}$ and 4?

- A) $\frac{8}{3}$
- B) $\frac{4}{3}$
- C) $\frac{2}{3}$
- D) $\frac{1}{3}$

3. What is the product of $\frac{3}{4}$ and 2?

- A) $\frac{3}{2}$
- B) $\frac{6}{4}$
- C) $\frac{3}{8}$
- D) $\frac{1}{4}$

4. What is the product of $\frac{1}{4}$ and 5?

- A) $\frac{1}{20}$
- B) $\frac{5}{4}$
- C) $\frac{1}{2}$
- D) $\frac{5}{4}$

5. What is the product of $\frac{2}{5}$ and 3?

- A) $\frac{6}{5}$
- B) $\frac{2}{3}$
- C) $\frac{6}{5}$
- D) $\frac{1}{5}$

Section B: Short Answer

6. Explain how to multiply fractions.
7. What is the product of $\frac{3}{4}$ and $\frac{2}{3}$?
8. Explain how to simplify a product of fractions.
9. What is the product of $\frac{2}{5}$ and $\frac{3}{4}$?
10. Explain how to represent the product of fractions as a sum of equal parts.

Section C: Application Problems

11. A recipe calls for $\frac{1}{4}$ cup of sugar. If you want to make $\frac{3}{4}$ of the recipe, how much sugar will you need?
12. A bookshelf has 5 shelves, and each shelf can hold $\frac{3}{4}$ of a book. If the bookshelf is currently empty, how many books can it hold in total?
13. A water tank can hold $\frac{3}{4}$ of a liter of water. If $\frac{2}{3}$ of the tank is already filled, how much more water can be added?
14. A pizza has 8 slices, and $\frac{3}{4}$ of it is already eaten. How many slices are left?
15. A garden has 12 rows of flowers, and each row has $\frac{3}{4}$ of a flower. If $\frac{2}{3}$ of the flowers are already bloomed, how many flowers are left to bloom?

Answer Key

1: $1/2 \times 3 = 3/2 = 1.5$

2: $8/3$

3: $6/4 = 1.5$

4: $5/4$

5: $6/5$

6: To multiply fractions, we multiply the numerators and denominators separately and then simplify the result.

7: The product of $3/4$ and $2/3$ is $6/12 = 1/2$.

8: To simplify a product of fractions, we cancel out any common factors in the numerators and denominators.

9: The product of $2/5$ and $3/4$ is $6/20 = 3/10$.

10: To represent the product of fractions as a sum of equal parts, we can divide the numerator and denominator by the greatest common divisor.

11: You will need $3/4 \times 1/4 = 3/16$ cup of sugar.

12: The bookshelf can hold $5 \times 3/4 = 15/4 = 3.75$ books in total.

13: You can add $1/3$ of a liter of water to the tank.

14: There are $8 \times 1/4 = 2$ slices left.

15: There are $12 \times 3/4 \times 2/3 = 24/3 = 8$ flowers left to bloom.