

2.6

Fraction Multiplication: Problem Type 2

• Example 1

Multiply.

$$\frac{2}{3} \times \frac{4}{5} = \frac{2 \times 4}{3 \times 5} = \frac{8}{15}$$

$$\frac{5}{8} \times \frac{7}{9} = \frac{5 \times 7}{8 \times 9} = \frac{35}{72}$$

• • • CHECK YOURSELF 1

Multiply.

a. $\frac{7}{8} \times \frac{3}{10}$

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

• Example 2

Multiply and write the result in lowest terms.

$$\frac{3}{4} \times \frac{2}{9} = \frac{3 \times 2}{4 \times 9} = \frac{6}{36} = \frac{1}{6}$$

Noting that $\frac{6}{36}$ is not in simplest form, we divide numerator and denominator by 6 to write the product in lowest terms.

• • • CHECK YOURSELF 2

Multiply and write the result in lowest terms.

$$\frac{5}{7} \times \frac{3}{10}$$

• • • CHECK YOURSELF ANSWERS

1. (a) $\frac{7}{8} \times \frac{3}{10} = \frac{7 \times 3}{8 \times 10} = \frac{21}{80}$; (b) $\frac{5}{7} \times \frac{3}{4} = \frac{5 \times 3}{7 \times 4} = \frac{15}{28}$.

2. $\frac{5}{7} \times \frac{3}{10} = \frac{5 \times 3}{7 \times 10} = \frac{15}{70} = \frac{3}{14}$.

2.6 Exercises

Name _____

Section _____

Date _____

A N S W E R S

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____

Multiply. Be sure to simplify each product.

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

2. $\frac{2}{7} \times \frac{5}{9}$

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

4. $\frac{2}{3} \times \frac{8}{5}$

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

6. $\frac{6}{11} \times \frac{8}{6}$

7. $\frac{6}{13} \times \frac{4}{9}$

8. $\frac{5}{9} \times \frac{6}{11}$

9. $\frac{3}{11} \times \frac{7}{9}$

10. $\frac{7}{9} \times \frac{3}{5}$

11. $\frac{3}{10} \times \frac{5}{9}$

12. $\frac{5}{21} \times \frac{14}{25}$

13. $\frac{7}{9} \times \frac{6}{5}$

14. $\frac{8}{13} \times \frac{26}{5}$

15. $7 \times \frac{5}{6}$

16. $\frac{3}{4} \times \frac{7}{11}$

17. $\frac{2}{5} \times \frac{3}{7}$

18. $\frac{5}{8} \times \frac{6}{11}$

19. $\frac{4}{9} \times \frac{7}{12}$

20. $\frac{6}{7} \times \frac{5}{12}$

21. $\frac{5}{9} \times \frac{18}{25}$