

Fractions: Skill 5 - 14C

Multiply Fractions and Mixed Numbers

Test question 14C. Multiply: $\frac{2}{5} \times 2\frac{1}{4}$ Write the answer in simplest form.

Step 1	Step 2	Step 3
Rename the mixed number as an improper fraction. $\frac{2}{5} \times 2\frac{1}{4} = \frac{2}{5} \times \frac{9}{4}$	Multiply. $\frac{2}{5} \times \frac{9}{4} = \frac{2 \times 9}{5 \times 4} = \frac{18}{20}$	Simplify. $\frac{18}{20} \div \frac{2}{2} = \frac{9}{10}$

You can simplify the factors in step 2 by dividing a common factor of a numerator and a denominator.

The denominator and numerator 5 and 9 do not have a common factor. $\frac{2}{5} \times \frac{9}{4} = \frac{2 \times \textcircled{9}}{\textcircled{5} \times 4}$	The numerator and denominator 2 and 4 have a common factor. Divide by 2. (which is the GCF) $\frac{2}{5} \times \frac{9}{4} = \frac{\cancel{2}^1 \times 9}{5 \times \cancel{4}_2}$	Multiply. $\frac{2}{5} \times \frac{9}{4} = \frac{\cancel{2}^1 \times 9}{5 \times \cancel{4}_2} = \frac{9}{5}$
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Directions: Multiply. Write the answer in simplest form.

Example $\frac{3}{4} \times 1\frac{2}{3}$	Step 1 $\frac{3}{4} \times 1\frac{2}{3} = \frac{3}{4} \times \frac{5}{3}$
Step 2 $\frac{3}{4} \times \frac{5}{3} = \frac{3 \times 5}{4 \times 3} = \frac{15}{12}$	Step 3 Simplify $\frac{15}{12} \div \frac{3}{3} = \frac{5}{4} \text{ or } 1\frac{1}{4}$

You can simplify the factors in step 2 above by dividing a common factor of a numerator and a denominator.

Step 2 from problem above.
$\frac{3}{4} \times \frac{5}{3} = \frac{\cancel{3}^1 \times 5}{4 \times \cancel{3}_1} = \frac{5}{4} \text{ or } 1\frac{1}{4}$

Fractions: Skill 5 - 14C

Multiply Fractions and Mixed Numbers**Directions:** Multiply. Write the answer in simplest form.

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

2. $\frac{2}{5} \times 2\frac{1}{4}$

3. $1\frac{1}{4} \times \frac{2}{3}$

4. $2\frac{1}{3} \times \frac{1}{2}$

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

6. $3\frac{1}{4} \times \frac{1}{4}$

7. $4\frac{1}{2} \times \frac{1}{3}$

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

9. $\frac{2}{3} \times 4\frac{1}{4}$

Fractions: Skill 5 - 14C

Multiply Fractions and Mixed Numbers**Directions:** Multiply. Write the answer in simplest form.

10. $3\frac{1}{2} \times \frac{2}{7}$

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

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

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

14. $4\frac{2}{3} \times \frac{1}{7}$

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

16. $\frac{1}{8} \times 2\frac{1}{2}$

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

18. $6\frac{2}{3} \times \frac{3}{5}$

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

20. $\frac{2}{7} \times 1\frac{1}{6}$

21. $3\frac{4}{7} \times \frac{1}{4}$

Answers: Skill 14C, Grade 5

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

2. $\frac{9}{10}$

3. $\frac{5}{6}$

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

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

6. $\frac{13}{16}$

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

8. $1\frac{5}{6}$

9. $2\frac{5}{6}$

10. 1

11. $\frac{5}{6}$

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

13. $1\frac{1}{2}$

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

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

16. $\frac{5}{16}$

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

18. 4

19. $1\frac{5}{16}$

20. $\frac{1}{3}$

21. $\frac{25}{28}$