



# Estimating Multiplication of Fractions

Name: \_\_\_\_\_

**Determine the answer using estimation.**

When multiplying a fraction and a whole number you can estimate the answer by remembering that the fraction is just part of a number.

$$5 \times 6 \frac{2}{3} =$$

In the example above,  $6 \frac{2}{3}$  is larger than 6 but less than 7. So we know the answer is going to be between  $5 \times 6$  and  $5 \times 7$ .

$$5 \times 6 \frac{2}{3} = 33 \frac{1}{3}$$

The actual answer is  $33 \frac{1}{3}$  which is between  $5 \times 6$  (30) and  $5 \times 7$  (35).

## Answers

1)  $3 \times 6 \frac{2}{6} =$       A. 19      B.  $16 \frac{2}{6}$       C. 25      D.  $15 \frac{2}{6}$

1. \_\_\_\_\_

2)  $9 \times 4 \frac{4}{6} =$       A.  $48 \frac{4}{6}$       B. 42      C. 48      D.  $33 \frac{4}{6}$

2. \_\_\_\_\_

3)  $6 \frac{1}{2} \times 2 =$       A.  $17 \frac{1}{2}$       B. 10      C. 13      D.  $9 \frac{1}{2}$

3. \_\_\_\_\_

4)  $3 \times 8 \frac{6}{8} =$       A.  $21 \frac{6}{8}$       B.  $30 \frac{6}{8}$       C.  $31 \frac{6}{8}$       D.  $26 \frac{2}{8}$

4. \_\_\_\_\_

5)  $8 \frac{3}{4} \times 8 =$       A. 56      B.  $74 \frac{3}{4}$       C. 70      D. 60

5. \_\_\_\_\_

6)  $5 \frac{7}{9} \times 3 =$       A.  $17 \frac{3}{9}$       B.  $13 \frac{3}{9}$       C.  $22 \frac{3}{9}$       D.  $21 \frac{7}{9}$

6. \_\_\_\_\_

7)  $3 \frac{5}{7} \times 7 =$       A. 26      B. 30      C. 18      D. 17

7. \_\_\_\_\_

8)  $3 \times 7 \frac{3}{5} =$       A.  $18 \frac{3}{5}$       B.  $27 \frac{4}{5}$       C.  $19 \frac{4}{5}$       D.  $22 \frac{4}{5}$

8. \_\_\_\_\_

9)  $2 \times 5 \frac{2}{7} =$       A.  $8 \frac{4}{7}$       B.  $8 \frac{2}{7}$       C.  $10 \frac{4}{7}$       D.  $6 \frac{2}{7}$

9. \_\_\_\_\_

10)  $5 \frac{3}{8} \times 4 =$       A.  $27 \frac{4}{8}$       B.  $21 \frac{4}{8}$       C.  $28 \frac{4}{8}$       D.  $27 \frac{3}{8}$

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_



## Estimating Multiplication of Fractions

Name: **Answer Key**

Determine the answer using estimation.

When multiplying a fraction and a whole number you can estimate the answer by remembering that the fraction is just part of a number.

$$5 \times 6 \frac{2}{3} =$$

In the example above,  $6 \frac{2}{3}$  is larger than 6 but less than 7. So we know the answer is going to be between  $5 \times 6$  and  $5 \times 7$ .

$$5 \times 6 \frac{2}{3} = 33 \frac{1}{3}$$

The actual answer is  $33 \frac{1}{3}$  which is between  $5 \times 6$  (30) and  $5 \times 7$  (35).

**Answers**

1)  $3 \times 6 \frac{2}{6} =$       A. 19      B.  $16 \frac{2}{6}$       C. 25      D.  $15 \frac{2}{6}$

1. **A**

2)  $9 \times 4 \frac{4}{6} =$       A.  $48 \frac{4}{6}$       B. 42      C. 48      D.  $33 \frac{4}{6}$

2. **B**

3)  $6 \frac{1}{2} \times 2 =$       A.  $17 \frac{1}{2}$       B. 10      C. 13      D.  $9 \frac{1}{2}$

3. **C**

4)  $3 \times 8 \frac{6}{8} =$       A.  $21 \frac{6}{8}$       B.  $30 \frac{6}{8}$       C.  $31 \frac{6}{8}$       D.  $26 \frac{2}{8}$

4. **D**

5)  $8 \frac{3}{4} \times 8 =$       A. 56      B.  $74 \frac{3}{4}$       C. 70      D. 60

5. **C**

6)  $5 \frac{7}{9} \times 3 =$       A.  $17 \frac{3}{9}$       B.  $13 \frac{3}{9}$       C.  $22 \frac{3}{9}$       D.  $21 \frac{7}{9}$

6. **A**

7)  $3 \frac{5}{7} \times 7 =$       A. 26      B. 30      C. 18      D. 17

7. **A**

8)  $3 \times 7 \frac{3}{5} =$       A.  $18 \frac{3}{5}$       B.  $27 \frac{4}{5}$       C.  $19 \frac{4}{5}$       D.  $22 \frac{4}{5}$

8. **D**

9)  $2 \times 5 \frac{2}{7} =$       A.  $8 \frac{4}{7}$       B.  $8 \frac{2}{7}$       C.  $10 \frac{4}{7}$       D.  $6 \frac{2}{7}$

9. **C**

10)  $5 \frac{3}{8} \times 4 =$       A.  $27 \frac{4}{8}$       B.  $21 \frac{4}{8}$       C.  $28 \frac{4}{8}$       D.  $27 \frac{3}{8}$

10. **B**

11. **A**

12. **B**