



## 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  $5 \times 7$ .

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

## Answers

1)  $2 \times 8 \frac{1}{5} =$       A.  $16 \frac{2}{5}$       B.  $12 \frac{1}{5}$       C.  $20 \frac{1}{5}$       D.  $20 \frac{2}{5}$

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

2)  $9 \times 6 \frac{3}{9} =$       A. 57      B. 51      C. 52      D.  $66 \frac{3}{9}$

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

3)  $3 \times 8 \frac{4}{5} =$       A.  $29 \frac{2}{5}$       B.  $21 \frac{2}{5}$       C.  $30 \frac{4}{5}$       D.  $26 \frac{2}{5}$

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

4)  $9 \frac{5}{7} \times 7 =$       A.  $60 \frac{5}{7}$       B.  $73 \frac{5}{7}$       C. 77      D. 68

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

5)  $3 \frac{2}{3} \times 2 =$       A.  $11 \frac{2}{3}$       B.  $4 \frac{1}{3}$       C.  $7 \frac{1}{3}$       D.  $11 \frac{1}{3}$

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

6)  $9 \frac{2}{9} \times 8 =$       A.  $69 \frac{7}{9}$       B.  $69 \frac{2}{9}$       C.  $68 \frac{2}{9}$       D.  $73 \frac{7}{9}$

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

7)  $9 \times 3 \frac{4}{7} =$       A.  $32 \frac{1}{7}$       B.  $23 \frac{4}{7}$       C.  $40 \frac{4}{7}$       D.  $25 \frac{1}{7}$

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

8)  $5 \frac{4}{9} \times 4 =$       A.  $26 \frac{4}{9}$       B.  $21 \frac{7}{9}$       C.  $17 \frac{7}{9}$       D.  $28 \frac{4}{9}$

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

9)  $9 \frac{7}{8} \times 7 =$       A.  $77 \frac{1}{8}$       B.  $74 \frac{1}{8}$       C.  $69 \frac{1}{8}$       D.  $74 \frac{7}{8}$

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

10)  $5 \times 6 \frac{6}{9} =$       A.  $33 \frac{3}{9}$       B.  $40 \frac{3}{9}$       C.  $38 \frac{3}{9}$       D.  $26 \frac{6}{9}$

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)  $2 \times 8 \frac{1}{5} =$       A.  $16 \frac{2}{5}$       B.  $12 \frac{1}{5}$       C.  $20 \frac{1}{5}$       D.  $20 \frac{2}{5}$

1. **A**

2)  $9 \times 6 \frac{3}{9} =$       A. 57      B. 51      C. 52      D.  $66 \frac{3}{9}$

2. **A**

3)  $3 \times 8 \frac{4}{5} =$       A.  $29 \frac{2}{5}$       B.  $21 \frac{2}{5}$       C.  $30 \frac{4}{5}$       D.  $26 \frac{2}{5}$

3. **D**

4)  $9 \frac{5}{7} \times 7 =$       A.  $60 \frac{5}{7}$       B.  $73 \frac{5}{7}$       C. 77      D. 68

4. **D**

5)  $3 \frac{2}{3} \times 2 =$       A.  $11 \frac{2}{3}$       B.  $4 \frac{1}{3}$       C.  $7 \frac{1}{3}$       D.  $11 \frac{1}{3}$

5. **C**

6)  $9 \frac{2}{9} \times 8 =$       A.  $69 \frac{7}{9}$       B.  $69 \frac{2}{9}$       C.  $68 \frac{2}{9}$       D.  $73 \frac{7}{9}$

6. **D**

7)  $9 \times 3 \frac{4}{7} =$       A.  $32 \frac{1}{7}$       B.  $23 \frac{4}{7}$       C.  $40 \frac{4}{7}$       D.  $25 \frac{1}{7}$

7. **A**

8)  $5 \frac{4}{9} \times 4 =$       A.  $26 \frac{4}{9}$       B.  $21 \frac{7}{9}$       C.  $17 \frac{7}{9}$       D.  $28 \frac{4}{9}$

8. **B**

9)  $9 \frac{7}{8} \times 7 =$       A.  $77 \frac{1}{8}$       B.  $74 \frac{1}{8}$       C.  $69 \frac{1}{8}$       D.  $74 \frac{7}{8}$

9. **C**

10)  $5 \times 6 \frac{6}{9} =$       A.  $33 \frac{3}{9}$       B.  $40 \frac{3}{9}$       C.  $38 \frac{3}{9}$       D.  $26 \frac{6}{9}$

10. **A**

11. **A**

12. **A**