



# 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)  $4 \frac{1}{2} \times 6 =$       A. 27      B. 21      C.  $34 \frac{1}{2}$       D.  $22 \frac{1}{2}$

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

2)  $3 \frac{4}{9} \times 8 =$       A.  $27 \frac{5}{9}$       B.  $21 \frac{5}{9}$       C.  $22 \frac{5}{9}$       D.  $35 \frac{4}{9}$

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

3)  $3 \times 8 \frac{1}{2} =$       A.  $21 \frac{1}{2}$       B.  $25 \frac{1}{2}$       C.  $20 \frac{1}{2}$       D.  $29 \frac{1}{2}$

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

4)  $8 \times 8 \frac{1}{4} =$       A. 80      B. 66      C.  $74 \frac{1}{4}$       D. 75

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

5)  $5 \frac{3}{5} \times 7 =$       A.  $33 \frac{3}{5}$       B.  $46 \frac{3}{5}$       C.  $33 \frac{1}{5}$       D.  $39 \frac{1}{5}$

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

6)  $7 \times 8 \frac{1}{10} =$       A.  $56 \frac{7}{10}$       B.  $54 \frac{7}{10}$       C.  $65 \frac{1}{10}$       D.  $70 \frac{7}{10}$

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

7)  $9 \frac{2}{4} \times 5 =$       A.  $54 \frac{2}{4}$       B.  $53 \frac{2}{4}$       C.  $41 \frac{2}{4}$       D.  $47 \frac{2}{4}$

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

8)  $3 \times 6 \frac{2}{3} =$       A. 20      B. 23      C. 15      D. 25

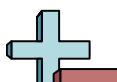
8. \_\_\_\_\_

9)  $8 \times 6 \frac{1}{2} =$       A. 40      B. 46      C. 52      D.  $45 \frac{1}{2}$

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

10)  $8 \frac{1}{8} \times 4 =$       A.  $39 \frac{4}{8}$       B.  $40 \frac{4}{8}$       C.  $32 \frac{4}{8}$       D.  $29 \frac{4}{8}$

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



# 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).

1)  $4 \frac{1}{2} \times 6 =$       A. 27      B. 21      C.  $34 \frac{1}{2}$       D.  $22 \frac{1}{2}$

1. **A**

2)  $3 \frac{4}{9} \times 8 =$       A.  $27 \frac{5}{9}$       B.  $21 \frac{5}{9}$       C.  $22 \frac{5}{9}$       D.  $35 \frac{4}{9}$

2. **A**

3)  $3 \times 8 \frac{1}{2} =$       A.  $21 \frac{1}{2}$       B.  $25 \frac{1}{2}$       C.  $20 \frac{1}{2}$       D.  $29 \frac{1}{2}$

3. **B**

4)  $8 \times 8 \frac{1}{4} =$       A. 80      B. 66      C.  $74 \frac{1}{4}$       D. 75

4. **B**

5)  $5 \frac{3}{5} \times 7 =$       A.  $33 \frac{3}{5}$       B.  $46 \frac{3}{5}$       C.  $33 \frac{1}{5}$       D.  $39 \frac{1}{5}$

5. **C**

6)  $7 \times 8 \frac{1}{10} =$       A.  $56 \frac{7}{10}$       B.  $54 \frac{7}{10}$       C.  $65 \frac{1}{10}$       D.  $70 \frac{7}{10}$

6. **D**

7)  $9 \frac{2}{4} \times 5 =$       A.  $54 \frac{2}{4}$       B.  $53 \frac{2}{4}$       C.  $41 \frac{2}{4}$       D.  $47 \frac{2}{4}$

7. **A**

8)  $3 \times 6 \frac{2}{3} =$       A. 20      B. 23      C. 15      D. 25

8. **C**

9)  $8 \times 6 \frac{1}{2} =$       A. 40      B. 46      C. 52      D.  $45 \frac{1}{2}$

9. **B**

10)  $8 \frac{1}{8} \times 4 =$       A.  $39 \frac{4}{8}$       B.  $40 \frac{4}{8}$       C.  $32 \frac{4}{8}$       D.  $29 \frac{4}{8}$

10. **D**

**Answers**

1. **A**

2. **A**

3. **B**

4. **B**

5. **D**

6. **A**

7. **D**

8. **A**

9. **C**

10. **C**

11. **B**

12. **C**