



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 5×6 and 5×7 .

$5 \times 6 \frac{2}{3} = 33 \frac{1}{3}$
The actual answer is $33 \frac{1}{3}$ which is between 5×6 (30) and 5×7 (35).

Answers

1) $5 \times 8 \frac{2}{3} =$ A. $49 \frac{2}{3}$ B. $37 \frac{1}{3}$ C. $47 \frac{1}{3}$ D. $43 \frac{1}{3}$

1. _____

2) $5 \frac{2}{6} \times 4 =$ A. $27 \frac{2}{6}$ B. $21 \frac{2}{6}$ C. $16 \frac{2}{6}$ D. $26 \frac{2}{6}$

2. _____

3) $2 \times 3 \frac{6}{8} =$ A. $10 \frac{6}{8}$ B. $7 \frac{4}{8}$ C. $2 \frac{6}{8}$ D. $12 \frac{6}{8}$

3. _____

4) $7 \frac{3}{5} \times 4 =$ A. $36 \frac{3}{5}$ B. $34 \frac{3}{5}$ C. $30 \frac{2}{5}$ D. $25 \frac{3}{5}$

4. _____

5) $9 \times 9 \frac{1}{4} =$ A. $93 \frac{1}{4}$ B. $83 \frac{1}{4}$ C. $99 \frac{1}{4}$ D. $79 \frac{1}{4}$

5. _____

6) $5 \frac{1}{9} \times 9 =$ A. $57 \frac{1}{9}$ B. 42 C. 46 D. 63

6. _____

7) $3 \frac{5}{9} \times 6 =$ A. $16 \frac{5}{9}$ B. $15 \frac{3}{9}$ C. $21 \frac{3}{9}$ D. $15 \frac{5}{9}$

7. _____

8) $5 \frac{1}{10} \times 2 =$ A. $15 \frac{2}{10}$ B. $10 \frac{2}{10}$ C. $14 \frac{2}{10}$ D. $16 \frac{1}{10}$

8. _____

9) $9 \times 8 \frac{1}{3} =$ A. 84 B. $70 \frac{1}{3}$ C. 63 D. 75

9. _____

10) $5 \times 4 \frac{7}{8} =$ A. $17 \frac{7}{8}$ B. $28 \frac{7}{8}$ C. $17 \frac{3}{8}$ D. $24 \frac{3}{8}$

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 5×6 and 5×7 .
 $5 \times 6 \frac{2}{3} = 33 \frac{1}{3}$
The actual answer is $33 \frac{1}{3}$ which is between 5×6 (30) and 5×7 (35).

- | | | |
|--------------------------------|---|--------------|
| 1) $5 \times 8 \frac{2}{3} =$ | A. $49 \frac{2}{3}$ B. $37 \frac{1}{3}$ C. $47 \frac{1}{3}$ D. $43 \frac{1}{3}$ | 1. D |
| 2) $5 \frac{2}{6} \times 4 =$ | A. $27 \frac{2}{6}$ B. $21 \frac{2}{6}$ C. $16 \frac{2}{6}$ D. $26 \frac{2}{6}$ | 2. B |
| 3) $2 \times 3 \frac{6}{8} =$ | A. $10 \frac{6}{8}$ B. $7 \frac{4}{8}$ C. $2 \frac{6}{8}$ D. $12 \frac{6}{8}$ | 3. B |
| 4) $7 \frac{3}{5} \times 4 =$ | A. $36 \frac{3}{5}$ B. $34 \frac{3}{5}$ C. $30 \frac{2}{5}$ D. $25 \frac{3}{5}$ | 4. C |
| 5) $9 \times 9 \frac{1}{4} =$ | A. $93 \frac{1}{4}$ B. $83 \frac{1}{4}$ C. $99 \frac{1}{4}$ D. $79 \frac{1}{4}$ | 5. D |
| 6) $5 \frac{1}{9} \times 9 =$ | A. $57 \frac{1}{9}$ B. 42 C. 46 D. 63 | 6. D |
| 7) $3 \frac{5}{9} \times 6 =$ | A. $16 \frac{5}{9}$ B. $15 \frac{3}{9}$ C. $21 \frac{3}{9}$ D. $15 \frac{5}{9}$ | 7. C |
| 8) $5 \frac{1}{10} \times 2 =$ | A. $15 \frac{2}{10}$ B. $10 \frac{2}{10}$ C. $14 \frac{2}{10}$ D. $16 \frac{1}{10}$ | 8. B |
| 9) $9 \times 8 \frac{1}{3} =$ | A. 84 B. $70 \frac{1}{3}$ C. 63 D. 75 | 9. A |
| 10) $5 \times 4 \frac{7}{8} =$ | A. $17 \frac{7}{8}$ B. $28 \frac{7}{8}$ C. $17 \frac{3}{8}$ D. $24 \frac{3}{8}$ | 10. D |

Answers

1. **D**
2. **B**
3. **B**
4. **C**
5. **B**
6. **C**
7. **C**
8. **B**
9. **D**
10. **D**
11. **B**
12. **C**