

**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. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

1) $3 \frac{2}{3} \times 2 =$ A. $11 \frac{1}{3}$ B. $3 \frac{2}{3}$ C. $7 \frac{1}{3}$ D. $6 \frac{2}{3}$

2) $6 \times 2 \frac{7}{8} =$ A. $10 \frac{7}{8}$ B. $24 \frac{1}{4}$ C. $8 \frac{7}{8}$ D. $17 \frac{1}{4}$

3) $2 \frac{3}{8} \times 6 =$ A. $14 \frac{3}{8}$ B. $14 \frac{1}{4}$ C. $9 \frac{3}{8}$ D. $16 \frac{3}{8}$

4) $5 \frac{3}{8} \times 8 =$ A. 0 B. $38 \frac{3}{8}$ C. $45 \frac{3}{8}$ D. $44 \frac{3}{8}$

5) $8 \frac{6}{9} \times 6 =$ A. $52 \frac{2}{3}$ B. 0 C. $45 \frac{2}{3}$ D. $50 \frac{2}{3}$

6) $9 \frac{1}{3} \times 2 =$ A. $16 \frac{2}{3}$ B. $18 \frac{2}{3}$ C. $23 \frac{2}{3}$ D. $16 \frac{1}{3}$

7) $3 \times 4 \frac{1}{3} =$ A. $8 \frac{1}{3}$ B. $12 \frac{1}{3}$ C. $13 \frac{1}{3}$ D. 0

8) $4 \frac{1}{6} \times 8 =$ A. $24 \frac{1}{3}$ B. $29 \frac{1}{6}$ C. $28 \frac{1}{6}$ D. $33 \frac{1}{3}$

9) $2 \frac{1}{4} \times 9 =$ A. $20 \frac{1}{4}$ B. $29 \frac{1}{4}$ C. $16 \frac{1}{4}$ D. $14 \frac{1}{4}$

10) $8 \times 7 \frac{2}{7} =$ A. $67 \frac{2}{7}$ B. $62 \frac{2}{7}$ C. $58 \frac{2}{7}$ D. $52 \frac{2}{7}$

**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) $3 \frac{2}{3} \times 2 =$ A. $11 \frac{1}{3}$ B. $3 \frac{2}{3}$ C. $7 \frac{1}{3}$ D. $6 \frac{2}{3}$
- 2) $6 \times 2 \frac{7}{8} =$ A. $10 \frac{7}{8}$ B. $24 \frac{1}{4}$ C. $8 \frac{7}{8}$ D. $17 \frac{1}{4}$
- 3) $2 \frac{3}{8} \times 6 =$ A. $14 \frac{3}{8}$ B. $14 \frac{1}{4}$ C. $9 \frac{3}{8}$ D. $16 \frac{3}{8}$
- 4) $5 \frac{3}{8} \times 8 =$ A. 0 B. $38 \frac{3}{8}$ C. $45 \frac{3}{8}$ D. $44 \frac{3}{8}$
- 5) $8 \frac{6}{9} \times 6 =$ A. $52 \frac{2}{3}$ B. 0 C. $45 \frac{2}{3}$ D. $50 \frac{2}{3}$
- 6) $9 \frac{1}{3} \times 2 =$ A. $16 \frac{2}{3}$ B. $18 \frac{2}{3}$ C. $23 \frac{2}{3}$ D. $16 \frac{1}{3}$
- 7) $3 \times 4 \frac{1}{3} =$ A. $8 \frac{1}{3}$ B. $12 \frac{1}{3}$ C. $13 \frac{1}{3}$ D. 0
- 8) $4 \frac{1}{6} \times 8 =$ A. $24 \frac{1}{3}$ B. $29 \frac{1}{6}$ C. $28 \frac{1}{6}$ D. $33 \frac{1}{3}$
- 9) $2 \frac{1}{4} \times 9 =$ A. $20 \frac{1}{4}$ B. $29 \frac{1}{4}$ C. $16 \frac{1}{4}$ D. $14 \frac{1}{4}$
- 10) $8 \times 7 \frac{2}{7} =$ A. $67 \frac{2}{7}$ B. $62 \frac{2}{7}$ C. $58 \frac{2}{7}$ D. $52 \frac{2}{7}$

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