Use the visual model to solve each problem.

\[
\frac{2}{4} \times 3 = \quad \frac{2}{4} \times 3 = \quad \frac{2}{4} \times 3 = 1 \frac{3}{4}
\]

To solve multiplication problems with fractions one strategy is to think of them as addition problems. For example, the problem above is the same as:

\[
\frac{2}{4} + \frac{2}{4} + \frac{2}{4}
\]

If we shade in \(\frac{2}{4}\) on the fractions below 3 times we can see a visual representation of the problem.

After shading it in we can see why \(\frac{2}{4}\) three times is equal to 1 whole and \(\frac{3}{4}\).

1) \(\frac{8}{10} \times 6 = \)

2) \(\frac{4}{5} \times 3 = \)

3) \(\frac{1}{5} \times 3 = \)

4) \(\frac{4}{5} \times 6 = \)

5) \(\frac{2}{4} \times 7 = \)

6) \(\frac{2}{5} \times 2 = \)

7) \(\frac{1}{3} \times 7 = \)

8) \(\frac{1}{8} \times 4 = \)

9) \(\frac{3}{4} \times 3 = \)

10) \(\frac{2}{5} \times 7 = \)

11) \(\frac{7}{8} \times 3 = \)

12) \(\frac{2}{8} \times 7 = \)
### Multiplying Fractions by Whole Numbers (visual)

Use the visual model to solve each problem.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Multiplication</th>
<th>Visual Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{2}{4} \times 3 = )</td>
<td>If we shade in ( \frac{2}{4} ) on the fractions below 3 times we can see a visual representation of the problem.</td>
<td><img src="visual_model.png" alt="" /></td>
</tr>
</tbody>
</table>

To solve multiplication problems with fractions one strategy is to think of them as addition problems. For example the problem above is the same as:

\[ \frac{2}{4} + \frac{2}{4} + \frac{2}{4} \]

1. \( \frac{8}{10} \times 6 = \)
2. \( \frac{4}{5} \times 3 = \)
3. \( \frac{1}{5} \times 3 = \)
4. \( \frac{4}{5} \times 6 = \)
5. \( \frac{2}{4} \times 7 = \)
6. \( \frac{2}{5} \times 2 = \)
7. \( \frac{1}{3} \times 7 = \)
8. \( \frac{1}{8} \times 4 = \)
9. \( \frac{3}{4} \times 3 = \)
10. \( \frac{2}{5} \times 7 = \)
11. \( \frac{7}{8} \times 3 = \)
12. \( \frac{2}{8} \times 7 = \)

**Answers**

1. \( 4 \frac{8}{10} \)
2. \( 2 \frac{3}{5} \)
3. \( 0 \frac{3}{5} \)
4. \( 4 \frac{7}{5} \)
5. \( 3 \frac{2}{4} \)
6. \( 0 \frac{4}{5} \)
7. \( 2 \frac{1}{3} \)
8. \( 0 \frac{4}{8} \)
9. \( 2 \frac{3}{4} \)
10. \( 2 \frac{3}{5} \)
11. \( 2 \frac{5}{8} \)
12. \( 1 \frac{7}{8} \)