### Basic Math Skills

#### Fraction fun!

1. **Simplify:**
   - (a) \(3 \times \frac{1}{8} = \)
   - (b) \(\frac{5}{8} \times 3 = \)
   - (c) \(\frac{5}{8} \times \frac{6}{25} = \)

2. **Simplify:**
   - (a) \(\frac{2}{7} + \frac{3}{7} = \)
   - (b) \(\frac{3}{8} + \frac{1}{8} = \)
   - (c) \(\frac{3}{8} - \frac{1}{8} = \)

3. **Simplify:**
   - (a) \(\frac{3}{5} = \)
   - (b) \(\frac{3}{4} = \)

4. **Fill in the blanks to make each pair of fractions equivalent:**
   - (a) \(\frac{2}{5} = \frac{15}{\phantom{15}}\)
   - (b) \(\frac{40}{\phantom{40}} = \frac{32}{\phantom{32}}\)
   - (c) \(\frac{\phantom{175}}{100} = \frac{7}{\phantom{7}}\)
   - (d) \(\frac{\phantom{24}}{3} = \frac{24}{\phantom{24}}\)

5. **(a) Name 3 factors of 10.**
   - (b) Name 3 multiples of 10.
   - (c) Name 3 common multiples of 4 and 6.
   - (d) Circle all prime numbers below:
     - 2, 9, 17, 35, 47, 49, 51, 57, 231

6. **(a) Find the prime factorization of 360.**
   - (b) Find the prime factorization of 405.
   - (c) Find the least common multiple (LCM) of 360 and 405.
7. Suppose that it takes 12 pizzas to feed 32 kids.

Describe this situation with two different statements, each involving a ratio. Include a fraction in lowest terms and the word "per" in each statement.

8. Simplify:

<table>
<thead>
<tr>
<th>(a)</th>
<th>( \frac{1}{2} + \frac{1}{4} = )</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>( \frac{11}{30} + \frac{7}{45} = )</td>
</tr>
<tr>
<td>(b)</td>
<td>( \frac{11}{30} - \frac{7}{45} = )</td>
</tr>
</tbody>
</table>

9. Simplify:

<table>
<thead>
<tr>
<th>(a)</th>
<th>( \frac{99}{80} \times \frac{200}{81} = )</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>( \frac{75}{22} \div \frac{45}{154} = )</td>
</tr>
</tbody>
</table>

10. (a) Write as a whole number or mixed number: \( \frac{37}{10} = \)

(b) Write as an (improper) fraction: \( \frac{7\frac{1}{2}}{2} = \)

(c) Write as an (improper) fraction: \( \frac{3}{4} = \)

11. Suppose you can go 850 miles in 15 hours.

(a) How far can you go in 24 hours?

(b) How long will it take to go 3400 miles?

12. Simplify:

<table>
<thead>
<tr>
<th>(a)</th>
<th>( \frac{7\frac{1}{2} - \frac{3}{4}}{4} = )</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>( \frac{17 - \frac{32}{18} + \frac{11}{60}}{45} = )</td>
</tr>
</tbody>
</table>
| (b) | \( \frac{17}{24} + \frac{21}{40} = \)
| (c) | \( \frac{11}{18} - \frac{7}{12} = \) |