Lesson 32 Problem Set

Name ___________________________________________ Date ______________________

1. Circle the expression equivalent to the sum of 3 and 2 divided by \( \frac{1}{3} \).

\[
\begin{align*}
\frac{3+2}{3} & \quad 3 + (2 ÷ \frac{1}{3})
\end{align*}
\]

2. Circle the expression(s) equivalent to \( 28 \) divided by the difference between \( \frac{4}{5} \) and \( \frac{7}{10} \).

\[
\begin{align*}
28 ÷ \left( \frac{4}{5} - \frac{7}{10} \right) & \quad \frac{28}{\frac{4}{5} - \frac{7}{10}}
\end{align*}
\]

3. Fill in the chart by writing an equivalent numerical expression.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a.</td>
<td>Half as much as the difference between ( 2 \frac{1}{4} ) and ( \frac{3}{8} ).</td>
</tr>
<tr>
<td>b.</td>
<td>The difference between ( 2 \frac{1}{4} ) and ( \frac{3}{8} ) divided by 4.</td>
</tr>
<tr>
<td>c.</td>
<td>A third of the sum of ( \frac{7}{8} ) and 22 tenths.</td>
</tr>
<tr>
<td>d.</td>
<td>Add 2.2 and ( \frac{7}{8} ), and then triple the sum.</td>
</tr>
</tbody>
</table>

4. Compare expressions 3(a) and 3(b). Without evaluating, identify the expression that is greater. Explain how you know.
Lesson 32: Interpret and evaluate numerical expressions including the language of scaling and fraction division.

5. Fill in the chart by writing an equivalent expression in word form.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a.</td>
<td>( \frac{3}{4} \times (1.75 + \frac{3}{5}) )</td>
</tr>
<tr>
<td>b.</td>
<td>( \frac{7}{9} - (\frac{1}{8} \times 0.2) )</td>
</tr>
<tr>
<td>c.</td>
<td>( (1.75 + \frac{3}{5}) \times \frac{4}{3} )</td>
</tr>
<tr>
<td>d.</td>
<td>( 2 \div \left( \frac{1}{2} \times \frac{4}{5} \right) )</td>
</tr>
</tbody>
</table>

6. Compare the expressions in 5(a) and 5(c). Without evaluating, identify the expression that is less. Explain how you know.

7. Evaluate the following expressions.
   
   a. \( (9 - 5) \div \frac{1}{3} \)  
   b. \( \frac{5}{3} \times (2 \times \frac{1}{4}) \)  
   c. \( \frac{1}{3} \div (1 \div \frac{1}{4}) \)
Lesson 32: Interpret and evaluate numerical expressions including the language of scaling and fraction division.

8. Choose an expression below that matches the story problem, and write it in the blank.

\[
\frac{2}{3} \times (20 - 5) \quad (\frac{2}{3} \times 20) - (\frac{2}{3} \times 5) \quad \frac{2}{3} \times 20 - 5 \quad (20 - \frac{2}{3}) - 5
\]

a. Farmer Green picked 20 carrots. He cooked \(\frac{2}{3}\) of them, and then gave 5 to his rabbits. Write the expression that tells how many carrots he had left.

Expression: ____________________________________

b. Farmer Green picked 20 carrots. He cooked 5 of them, and then gave \(\frac{2}{3}\) of the remaining carrots to his rabbits. Write the expression that tells how many carrots the rabbits will get.

Expression: ____________________________________