



Name _____

Date _____

1. Circle the expression equivalent to *the difference between 7 and 4, divided by a fifth.*

$7 + (4 \div \frac{1}{5})$

$\frac{7-4}{5}$

$(7 - 4) \div \frac{1}{5}$

$\frac{1}{5} \div (7 - 4)$

2. Circle the expression(s) equivalent to *42 divided by the sum of $\frac{2}{3}$ and $\frac{3}{4}$.*

$(\frac{2}{3} + \frac{3}{4}) \div 42$

$(42 \div \frac{2}{3}) + \frac{3}{4}$

$42 \div (\frac{2}{3} + \frac{3}{4})$

$\frac{42}{\frac{2}{3} + \frac{3}{4}}$

3. Fill in the chart by writing the equivalent numerical expression or expression in word form.

	Expression in word form	Numerical expression
a.	A fourth as much as the sum of $3\frac{1}{8}$ and 4.5	$(3\frac{1}{8} + 4.5) \div 4$ $\frac{1}{4} \times (3\frac{1}{8} + 4.5)$
b.		$(3\frac{1}{8} + 4.5) \div 5$
c.	Multiply $\frac{3}{5}$ by 5.8; then halve the product	$(\frac{3}{5} \times 5.8) \div 2$
d.		$\frac{1}{6} \times (4.8 - \frac{1}{2})$
e.		$8 - (\frac{1}{2} \div 9)$

4. Compare the expressions in 3(a) and 3(b). Without evaluating, identify the expression that is greater. Explain how you know.



5. Evaluate the following expressions.

a. $(11 - 6) \div \frac{1}{6}$

b. $\frac{9}{5} \times (4 \times \frac{1}{6})$

c. $\frac{1}{10} \div (5 \div \frac{1}{2})$

d. $\frac{3}{4} \times \frac{2}{5} \times \frac{4}{3}$

e. 50 divided by the difference between $\frac{3}{4}$ and $\frac{5}{8}$

$$\frac{\cancel{4}^3}{\cancel{3}_1} \times \frac{\cancel{2}^1}{5} \times \frac{\cancel{4}^2}{\cancel{3}_1} = \frac{6}{15} = \frac{2}{5}$$

$$\begin{aligned} & 50 \div \left(\frac{3}{4} - \frac{5}{8} \right) \\ &= 50 \div \left(\frac{6}{8} - \frac{5}{8} \right) \text{ or } \left(\frac{24}{32} - \frac{20}{32} = \frac{4}{32} = \frac{1}{8} \right) \\ &= 50 \div \frac{1}{8} \\ &= \frac{50}{1} \times 8 = 400 \end{aligned}$$

6. Lee is sending out 32 birthday party invitations. She gives 5 invitations to her mom to give to family members. Lee mails a third of the rest, and then she takes a break to walk her dog.

a. Write a numerical expression to describe how many invitations Lee has already mailed.

b. Which expression matches how many invitations still need to be sent out?

$32 - 5 - \frac{1}{3}(32 - 5)$

$\frac{2}{3} \times 32 - 5$

$(32 - 5) \div \frac{1}{3}$

$\frac{1}{3} \times (32 - 5)$