

Review:

1. What number is considered to be the "Additive Identity"?

0

2. What number is considered to be the "Multiplicative Identity"?

1

3. State the name of the property:

$$a+b=b+a$$

commutativity

$$(ab)c=a(bc)$$

associativity

$$a(b+c)=ab+ac$$

distributive

4. Simplify: $2[(16/8)-(-2)]+4$

$$2[(2+2)]+4$$
$$8+4 = 12$$

$$110. \quad \frac{1.2}{\left(-\frac{3}{5}\right)^2} - \frac{\cancel{3}^1}{\cancel{5}_1} \cdot \frac{\cancel{9}^1}{\cancel{15}_3} + \frac{7}{10}$$

$$6. \quad \frac{9}{25} - \frac{1}{3} + \frac{7}{10}$$

$5 \cdot 5$
 50
 50
 15
 15

$7(10+5)$

$$\frac{54 - 50 + 105}{150} = \boxed{\frac{109}{150}}$$

$$109. \quad \frac{1}{2} - \left(\frac{2}{3} \div \frac{5}{9} \right) + \frac{5}{6}$$

$$\frac{1}{2} - \left(\frac{2}{\cancel{3}} \cdot \frac{\cancel{9}^3}{5} \right) + \frac{5}{6}$$

$$\frac{15}{15} \cdot \frac{1}{2} - \frac{\cancel{6}^6}{\cancel{6}^6} \cdot \frac{6}{5} + \frac{5}{6} \cdot \frac{5}{5}$$

$$= \frac{15 - 36 + 25}{30} = \frac{4}{30} = \boxed{\frac{2}{15}}$$

1.3

38.

$$2b^2 \div \frac{ad}{2}$$

$$2(3)^2 \div \frac{2(-4)}{2}$$

$$2(3)^2 \div \frac{-8}{2}$$

$$2(9) \div (-4) = \frac{18}{-4} = \boxed{-\frac{9}{2}}$$

$$\begin{aligned} a &= 2 \\ b &= 3 \\ d &= -4 \end{aligned}$$

1.4 Verbal Expressions and Variable Expressions

+ more than, added to,
the sum of, total, increase by

- less than, difference, minus,
decrease by

• times, product, multiplied, of

÷ divide, quotient, ratio

a^n exponent/power

2. a number decreased by
 the (difference between
 five and the number)

$$\textcircled{\smiley} - (1)(5 - \textcircled{\smiley})$$

$$\textcircled{\smiley} - 5 + \textcircled{\smiley}$$

$$2\textcircled{\smiley} - 5$$

8. one half of the total
of six times a number
and twenty-two

$$\frac{1}{2}(6x + 22)$$

$$= 3x + 11$$

14. The sum of two numbers is 20.
 Using x to represent the smaller of the two numbers, translate "the difference between five times the larger number and three less than the smaller number"

$$5 \cdot (20 - x) - (x - 3)$$

x

14 #1-16