

Name \_\_\_\_\_

Each of the 18 questions is worth 5 points plus 1 point for each of 10 homework problems for a total of 100

**Find the value of the expression.**

1)  $\frac{6(4 + 2) + 6 \cdot 2}{6(3 - 1)}$

**Evaluate the expression for the given values. If necessary, round to the nearest tenth.**

2)  $\frac{x + y}{6x - 5}$   $x = 6, y = 7$

**Simplify.**

3)  $- \left| -\frac{7}{8} \right|$

**Find the sum.**

$$4) [8 + (-23)] + [24 + (-9)]$$

**Find the difference.**

$$5) -7 - [(12 - 1) - (-7 + 2)]$$

**Perform the indicated operation.**

$$6) \frac{-18(-2) - (-6)(-2)}{-6(3) - 3(2)}$$

**Use the distributive property to write without parentheses.**

$$7) - (-8m + 4n - 5p)$$

**Simplify the expression by combining like terms.**

$$8) -\frac{3}{8}(z - 13) - \frac{1}{16}z$$

**Solve the equation.**

$$9) -8b + 8 + 6b = -3b + 13$$

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$$10) -5(-2x - 7) - 2(-7 + 3x) = -10 + 5x$$

$$11) -\frac{3}{4}y = -\frac{5}{8}$$

$$12) 6x + 8 = 9x - 8$$

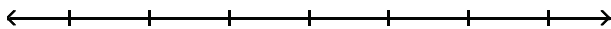
13)  $3(4x - 1) = 12$

**Solve the equation by first clearing the fractions.**

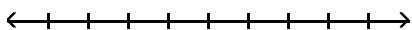
14)  $-\frac{2}{3}r + 2r = \frac{6}{5}r + \frac{2}{5}$

**Solve the inequality, then graph the solution.**

15)  $\frac{3}{4}t \geq -36$



$$16) -9(-8x + 2) + 1(x + 10) > -9(-8x + 16) - 1(x + 4)$$



**Solve the problem.**

17) A merchant has coffee worth \$20 a pound that she wishes to mix with 90 pounds of coffee worth \$60 a pound to get a mixture that can be sold for \$50 a pound. How many pounds of the \$20 coffee should be used?

18) A reservation clerk worked 7.65 hours one day. She spent twice as much time entering new reservations as she did verifying old ones and one and a half as much time calling to confirm reservations as verifying old ones. How much time did she spend entering new reservations?