

CLASSWORK - Combining Like Terms & Distributive Property

Combine like terms to simplify each expression.

- 1) $-4x + 5x$
- 2) $1 + 5v + v - 6$
- 3) $4n + 4 + 1 + 3n$
- 4) $11a + 11a$
- 5) $-2x - 8 - 7x + 2$
- 6) $7v + 6v$
- 7) $-8x - 10x$
- 8) $6 - 7n - 2n - 8$
- 9) $2k - k$
- 10) $-p - 11 + 3$
- 11) $9n + 3n$
- 12) $12x + 11 - 4$

Use Distributive Property.

- 13) $3(-7 - 8n)$
- 14) $-8(1 + 5m)$
- 15) $8(r + 1)$
- 16) $8(7x + 8)$
- 17) $2(6n - 8)$
- 18) $-3(8 - b)$
- 19) $-5(8v - 2)$
- 20) $-2(x - 5)$
- 21) $-(3a - 3)$
- 22) $-2(7 - 2n)$
- 23) $-8(5 - 3v)$
- 24) $-7(6x - 3)$

First, use Distributive Property, then Combine Like Terms to simplify each expression.

- 25) $-n + 4(n + 1)$
- 26) $-3(1 - 3x) + 2x$
- 27) $-2(-3k + 4) - 7$
- 28) $-3p - (-8 + 4p)$
- 29) $-4 + 6(-4x + 3)$
- 30) $3n + 3(1 + 8n)$
- 31) $-2 + 5(4 + 3r)$
- 32) $-1 + 3(m + 4)$
- 33) $-(-n + 2) - 2n$
- 34) $-3(5 + 2x) - 7$

Name_____

Two-Step Equations

Date_____ Period____

Solve each equation.

$$1) \ 6 = \frac{a}{4} + 2$$

$$2) \ -6 + \frac{x}{4} = -5$$

$$3) \ 9x - 7 = -7$$

$$4) \ 0 = 4 + \frac{n}{5}$$

$$5) \ -4 = \frac{r}{20} - 5$$

$$6) \ -1 = \frac{5+x}{6}$$

$$7) \ \frac{v+9}{3} = 8$$

$$8) \ 2(n+5) = -2$$

$$9) \ -9x + 1 = -80$$

$$10) \ -6 = \frac{n}{2} - 10$$

$$11) \ -2 = 2 + \frac{v}{4}$$

$$12) \ 144 = -12(x+5)$$

Name_____

Multi-Step Equations

Date_____ Period____

Solve each equation.

$$1) -20 = -4x - 6x$$

$$2) 6 = 1 - 2n + 5$$

$$3) 8x - 2 = -9 + 7x$$

$$4) a + 5 = -5a + 5$$

$$5) 4m - 4 = 4m$$

$$6) p - 1 = 5p + 3p - 8$$

$$7) 5p - 14 = 8p + 4$$

$$8) p - 4 = -9 + p$$

$$9) -8 = -(x + 4)$$

$$10) 12 = -4(-6x - 3)$$

$$11) 14 = -(p - 8)$$

$$12) -(7 - 4x) = 9$$

$$13) -18 - 6k = 6(1 + 3k)$$

$$14) 5n + 34 = -2(1 - 7n)$$

$$15) 2(4x - 3) - 8 = 4 + 2x$$

$$16) 3n - 5 = -8(6 + 5n)$$

$$17) -(1 + 7x) - 6(-7 - x) = 36$$

$$18) -3(4x + 3) + 4(6x + 1) = 43$$

$$19) 24a - 22 = -4(1 - 6a)$$

$$20) -5(1 - 5x) + 5(-8x - 2) = -4x - 8x$$

DAY 3

Name _____

One-Step Inequalities

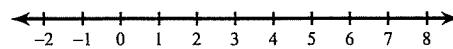
Date _____ Period ____

Solve each inequality and graph its solution.

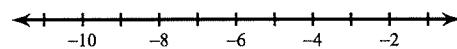
1) $-12 > x - 7$



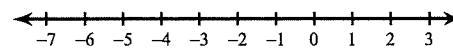
2) $-1 + r \geq 4$



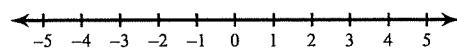
3) $n - 6 \leq -14$



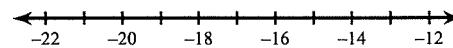
4) $b - 7 < -12$



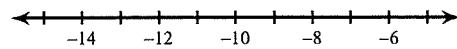
5) $a - 17 > -16$



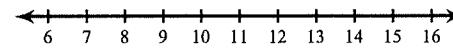
6) $15 + x \leq 0$



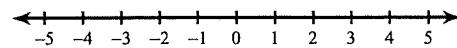
7) $3 + v \leq -9$



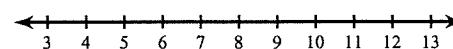
8) $8 \geq n - 6$



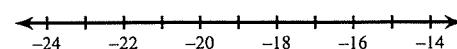
9) $-3x > 3$



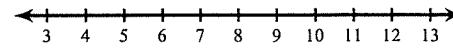
10) $\frac{n}{3} > 3$



11) $\frac{k}{4} < -4$



12) $-9x \geq -90$



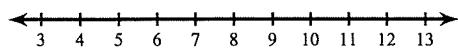
Name _____

Two-Step Inequalities

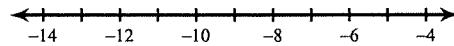
Date _____ Period ____

Solve each inequality and graph its solution.

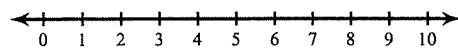
1) $2x + 4 \geq 24$



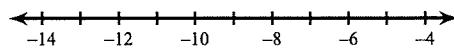
2) $\frac{m}{3} - 3 \leq -6$



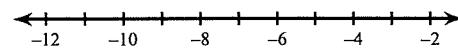
3) $-3(p + 1) \leq -18$



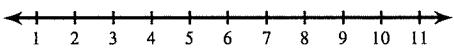
4) $-4(-4 + x) > 56$



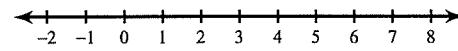
5) $-b - 2 > 8$



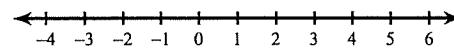
6) $-4(3 + n) > -32$



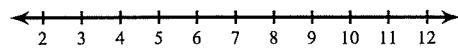
7) $4 + \frac{n}{3} < 6$



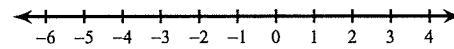
8) $-3(r - 4) \geq 0$



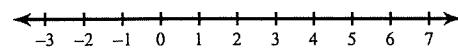
9) $-7x + 7 \leq -56$



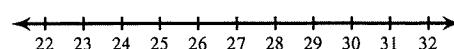
10) $-3(p - 7) \geq 21$



11) $-11x - 4 > -15$



12) $\frac{-9 + a}{15} > 1$



Name _____

Finding Slope From Two Points

Date _____ Period ____

Find the slope of the line through each pair of points.

1) $(19, -16), (-7, -15)$

$$\frac{y_2 - y_1}{x_2 - x_1} =$$

2) $(1, -19), (-2, -7)$

3) $(-4, 7), (-6, -4)$

4) $(20, 8), (9, 16)$

5) $(17, -13), (17, 8)$

6) $(19, 3), (20, 3)$

7) $(3, 0), (-11, -15)$

8) $(19, -2), (-11, 10)$

Name_____

Finding Slope From an Equation

Date_____ Period____

Find the slope of each line.

$$1) \ y = -\frac{5}{2}x - 5$$

$$2) \ y = -\frac{4}{3}x - 1$$

$$3) \ y = -x + 3$$

$$4) \ y = -4x - 1$$

$$5) \ 2x - y = 1$$

$$6) \ x + 2y = -8$$

$$7) \ 8x + 3y = -9$$

$$8) \ 4x + 5y = -10$$

$$9) \ x - y = -2$$

$$10) \ 4x - 3y = 9$$

Name_____

Multiplying Polynomials

Date_____ Period____

Find each product.

$$1) \ 6v(2v + 3)$$

$$2) \ 7(-5v - 8)$$

$$3) \ 2x(-2x - 3)$$

$$4) \ -4(v + 1)$$

$$5) \ (2n + 2)(6n + 1)$$

$$6) \ (4n + 1)(2n + 6)$$

$$7) \ (x - 3)(6x - 2)$$

$$8) \ (8p - 2)(6p + 2)$$

$$9) \ (6p + 8)(5p - 8)$$

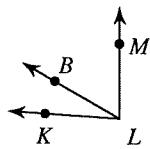
$$10) \ (3m - 1)(8m + 7)$$

$$11) \ (2a - 1)(8a - 5)$$

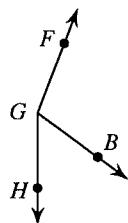
$$12) \ (5n + 6)(5n - 5)$$

The Angle Addition Postulate

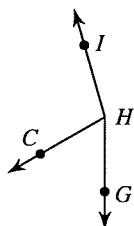
- 1) Find $m\angle KLM$ if $m\angle KLB = 26^\circ$
and $m\angle BLM = 60^\circ$.



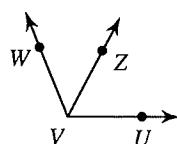
- 2) Find $m\angle FGH$ if $m\angle FGB = 105^\circ$
and $m\angle BGH = 54^\circ$.



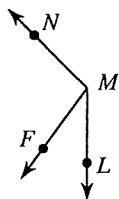
- 3) $m\angle GHC = 60^\circ$ and $m\angle CHI = 104^\circ$.
Find $m\angle GHI$.



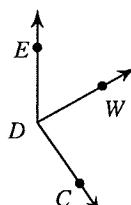
- 4) Find $m\angle WVU$ if $m\angle ZVU = 62^\circ$
and $m\angle WVZ = 50^\circ$.



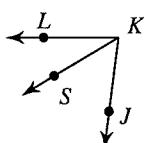
- 5) $m\angle FMN = 99^\circ$ and $m\angle LMF = 36^\circ$.
Find $m\angle LMN$.



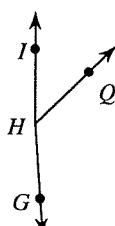
- 6) Find $m\angle WDC$ if $m\angle EDC = 145^\circ$
and $m\angle EDW = 61^\circ$.



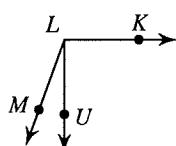
- 7) Find $m\angle JKL$ if $m\angle SKL = 31^\circ$
and $m\angle JKS = 52^\circ$.



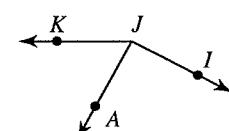
- 8) Find $m\angle IHQ$ if $m\angle IHG = 176^\circ$
and $m\angle QHG = 130^\circ$.



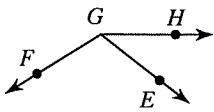
- 9) Find $m\angle KLU$ if $m\angle ULM = 20^\circ$
and $m\angle KLM = 110^\circ$.



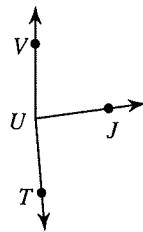
- 10) Find $m\angle IJA$ if $m\angle AJK = 61^\circ$
and $m\angle IJK = 153^\circ$.



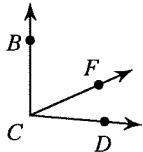
- 11) $m\angle HGF = 16x + 4$, $m\angle EGF = 110^\circ$,
and $m\angle HGE = 3x + 11$. Find x .



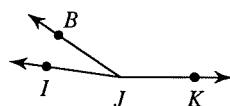
- 12) $m\angle VUT = 175^\circ$, $m\angle VUJ = 17x - 3$,
and $m\angle JUT = 17x + 8$. Find x .



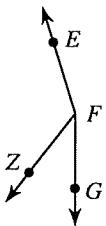
- 13) $m\angle FCD = x + 41$, $m\angle BCF = x + 78$,
and $m\angle BCD = 95^\circ$. Find x .



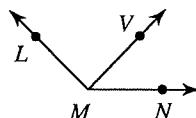
- 14) Find x if $m\angle BJK = 146 + 2x$,
 $m\angle IJK = 172^\circ$, and $m\angle IJB = 2x + 26$.



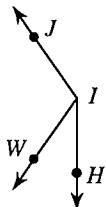
- 15) $m\angle GFZ = 38^\circ$, $m\angle ZFE = 2x + 125$,
and $m\angle GFE = x + 163$. Find x .



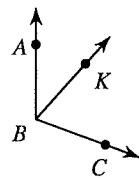
- 16) Find x if $m\angle LMN = 135^\circ$,
 $m\angle LMV = -1 + 45x$, and $m\angle VMN = 23x$.



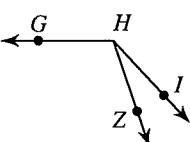
- 17) Find $m\angle HIW$ if $m\angle WIJ = 10x$,
 $m\angle HIJ = 145^\circ$, and $m\angle HIW = 2x + 13$.



- 18) $m\angle ABC = 17x + 8$, $m\angle ABK = 42^\circ$,
and $m\angle KBC = 12x - 4$. Find $m\angle ABC$.



- 19) $m\angle ZHG = 11x - 1$, $m\angle IHZ = 24^\circ$,
and $m\angle IHG = 12x + 13$. Find $m\angle IHG$.



- 20) $m\angle GFN = 4x + 10$, $m\angle NFE = 14x + 3$,
and $m\angle GFE = 157^\circ$. Find $m\angle NFE$.

