

Algebra 0507

Chapter 1

Review for Test #2

Worksheets 5-11

Name _____

Use the given formula to evaluate.

1. Find P in the formula $P = 2l + 2w$ if $l = 7, w = 3$ $P = 2(7) + 2(3)$ $P = 14 + 6$ $P = 20$	2. Find A in the formula $A = l \cdot w$ if $l = 10, w = \frac{1}{2}$ $A = 10(\frac{1}{2})$ $A = 5$
3. Find A in the formula $A = \frac{1}{2}h(b + a)$ if $h = 6, a = 2, b = 7$ $A = \frac{1}{2}(6)(7 + 2)$ $A = \frac{1}{2}(6)(9)$ $A = 3(9) = 27$	4. Find T in the formula $T = 6s^2$ if $s = 3$ $T = 6(3)^2$ $T = 6(9)$ $T = 54$

Find the solution set.

$3x + 2 \geq 10$; Replacement Set = $\{6, 8, 10\}$

Solution $\{6, 8, 10\}$

$x = 6$ $3(6) + 2 \geq 10$ $18 + 2 \geq 10$ $20 \geq 10$ T	$x = 8$ $3(8) + 2 \geq 10$ $24 + 2 \geq 10$ $26 \geq 10$ T	$x = 10$ $3(10) + 2 \geq 10$ $30 + 2 \geq 10$ $32 \geq 10$ T
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$x^2 + 5 < x$; Replacement Set = $\{0, 5, 10\}$

Solution $\emptyset$

$x = 0$ $0^2 + 5 < 0$ $5 < 0$ F	$x = 5$ $5^2 + 5 < 5$ $25 + 5 < 5$ $30 < 5$ F	$x = 10$ $10^2 + 5 < 10$ $100 + 5 < 10$ $105 < 10$ F
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Find the value of N for each formula. Replacement Set = $\{1, 3, 5\}$

1. $N = 4x^2 + 2$ $x=1$ $N = 4(1)^2 + 2$ $4(1) + 2$ $4 + 2 = 6$ $x=3$ $N = 4(3)^2 + 2$ $4(9) + 2$ $36 + 2 = 38$ $x=5$ $N = 4(5)^2 + 2$ $4(25) + 2$ $100 + 2 = 102$	2. $N = (4x)^2 + 2$ $x=1$ $N = (4 \cdot 1)^2 + 2$ $4^2 + 2$ $16 + 2 = 18$ $x=3$ $N = (4 \cdot 3)^2 + 2$ $12^2 + 2$ $144 + 2 = 146$ $x=5$ $N = (4 \cdot 5)^2 + 2$ $20^2 + 2$ $400 + 2 = 402$
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Complete the table and give the formula.

x	y
2	12
3	18
4	24
5	30
6	36
7	42
8	48

$$y = 6x$$

x	y
1	6
2	7
3	8
4	9
5	10
6	11
7	12

$$y = x + 5$$

x	y
7	3
8	4
9	5
12	8
14	10
16	12
18	14

$$y = x - 4$$

x	y
3	7
4	9
5	11
6	13
7	15
8	17
9	19

$$y = 2x + 1$$

Combine Like Terms

1. $7x + 3x$ $10x$	2. $9y - 4y$ $5y$	3. $\frac{2m+5+m}{3m+5}$
4. $\frac{8n-7-2n}{6n-7}$	5. $\frac{2x+4x+3y+4y}{6x+7y}$	6. $\frac{x+5y+3x-y}{4x+4y}$

