Term 2 – Year 7 – Homework – Week 2 Name: _____

Lesson 1 and 2

1. Calculate the value of each expression. Substitute the given value for the variable.

a) Given $x = 4$, calculate: $2x + 3$	b) Given $y = 6$, calculate: $4y - 5$	c) Given $a = 1$, calculate: $3a + 2$
d) Given $m = 3$, calculate: $6m - 4$	e) Given $n = 2$, calculate: $2n + 3n$	f) Given $t = 5$, calculate: $5t - 2t + 1$

2. Complete the table by substituting x = 1 to 6 into each rule.

$y = 2x$

x	1	2	3	4	5	6
y						

$y = x + 3$

x	1	2	3	4	5	6
y						

$y = 3x - 1$

x	1	2	3	4	5	6
y						

$y = 5 - x$

x	1	2	3	4	5	6
y						

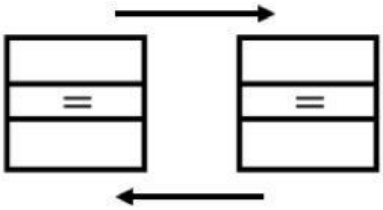
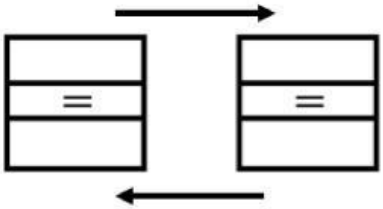
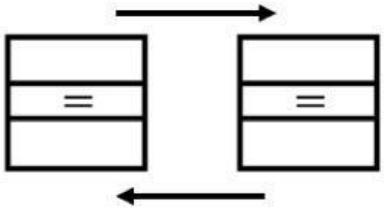
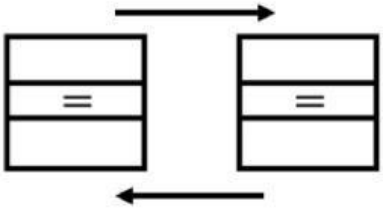
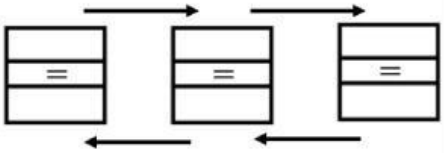
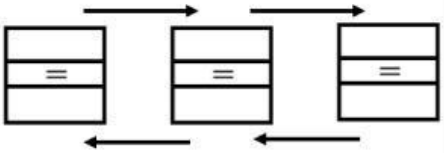
3. Identify components of algebraic expressions. List variables, coefficients, and constants.

a) $4x + 5$ Variables: Coefficients: Constants:	b) $2y - 3$ Variables: Coefficients: Constants:
c) $7a + 2a - 1$ Variables: Coefficients: Constants:	d) $3t + 1 - t$ Variables: Coefficients: Constants:

X =

Lesson 3

4. Solve equations using backtracking

a) $x + 3 = 7$ 	b) $2x = 12$ 	c) $x - 5 = 4$ 
d) $\frac{x}{3} = 6$ 	e) $4x - 2 = 10$ 	f) $2x + 8 = 14$ 

5. Solve by inspection – Use pen and paper to **evaluate**.

a) $x + 2 = 6$ X =	b) $x - 3 = 2$ X =	c) $3x = 9$ X =
d) $\frac{x}{2} = 4$ X =	e) $3x + 8 = 17$ X =	f) $5x - 5 = 10$ X =

6. Write and solve equations from word problems.

a) A number plus 5 equals 9	b) Double a number is 16
c) A number minus 3 is 10	d) A number divided by 2 is 7

e) Triple a number, subtract 4, equals 11	f) Two equal numbers add to 14