Review of L.14 & 15

1 The sum of three numbers is 138. The second number is twice the first, and the third is 7 less than the second. What are these numbers?

$\#1 + \#2 + \#3 = 138$

$(x) + (2x) + (2x-7) = 138$

1	2	3
x	$2x$ 29	$2x-7$ 28

(29) (58) (51)

Numbers are

$5x - 7 = 138$

$5x = 145$

$x = 29$

2 Hockey teams get 2 points in the standings for a win, one point for a tie, and no points for a loss. If a team has 27 points, and has 4 times more wins than ties, how many wins do they have?
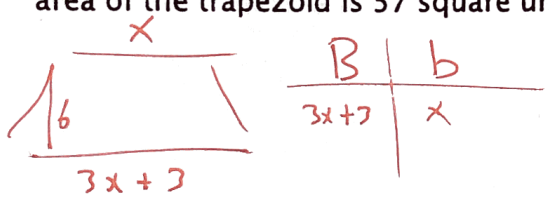
	Win	Tie	Lose
Points	2	1	0
Games.	4X	X	

Wins $4x = 12$

$W + T + L = 27$

$2(4x) + 1(x) + 0 = 27$

$8x + x + 0 = 27$

$9x = 27$

$x = 3$

3 The long base of a trapezoid is 3 units longer than three times the short base. The height of the trapezoid is 6 units. What is the length of the long base, given that the area of the trapezoid is 57 square units?

B	b
$3x+7$	x

$57 = \frac{h(t)}{}$

$A = \frac{h(B+b)}{2}$

$57 = \frac{6(4x+3)}{2}$

$x = 4$

long Base

$3x+3$

$\frac{12}{4} + 3$

15

4 Alberto spent $122 on 4 compact discs and 6 giant posters of his favourite groups. If a compact disc costs $8 more than a giant poster, what does each item cost?

$122 = 4CD + 6P$

$122 = 4(x+8) + 6(x)$

$122 = 4x + 32 + 6x$

$90 = 10x$

$9 = x$

CD	P
$x+8$	x

$CD = \overset{9}{x} + 8 = 17\$$

$P = x = 9\$$

5