Algebra RH - Answer Key **HW#**

1. $a + b + c = s$ $2.5 + 5.36 + (-24) = s$ $-16.14 = s$	2. $q = 2a + b$ $28 = 2a + (-16)$ $44 = 2a$ $22 = a$	3. $F = \frac{9}{5}C + 32$ $F = \frac{9}{5}(55) + 32$ $F = 99 + 32$ $F = 131°$
4. $s = \frac{n}{2}(f + b)$ $17\frac{1}{2} = \frac{7}{2}(f + 5\frac{1}{2})$ $\frac{35}{2} = \frac{7}{2}(f + 5\frac{1}{2})$ $\frac{2}{7} \bullet \frac{35}{2} = \frac{2}{7} \bullet \frac{7}{2}(f + 5\frac{1}{2})$ $5 = f + 5\frac{1}{2}$ $f = -\frac{1}{2}$	5. $s = \frac{n}{2}(f + b)$ $-42 = \frac{21}{2}(-11 + b)$ $\frac{2}{21} \bullet -42 = \frac{2}{21} \bullet \frac{21}{2}(-11 + b)$ $-4 = -11 + b$ $7 = b$	6. $V = \frac{1}{2}gt^2$ $15 = \frac{1}{2}g(10)^2$ $15 = \frac{1}{2}g(100)$ $15 = 50g$ $g = \frac{15}{50}$ reduces to $\frac{3}{10}$, or .3
7. $A = \frac{1}{2}h(b_1 + b_2)$ $120 = \frac{1}{2}h(12 + 18)$ $120 = \frac{1}{2}h(30)$ $120 = 15h$ $8 = h$	8. $A = \pi r^2$ if $r = 1$ if $r = 5$ $A = \pi(1)^2$ $A = \pi(5)^2$ $A = \pi$ $A = 25\pi$ 25 times larger	9. T : total # of calories x: number of pretzels y: number of chips $T = 6x + 20y$

10. c: total cost

p: number of pounds where $p \geq 500$

$C = 750 + .3(p - 500)$

11. e: number of 8th graders

s: number of 7th graders

P = Income – Expenses

$P = (3e + 3.5s + 100) - (200 + 50 + .5e + .5s)$

$P = -150 + 2.5e + 3s$

OR x: number of people taking refreshments

$P = (3e + 3.5s + 100) - (200 + 50 + .5x)$