

Week in Review # 1

1. (a) $f(5) = 51$
(b) $x = 4$ and $x = -4$
(c) vertical intercept = -49
horizontal intercepts are 3.5 and -3.5
2. Graph given in written solutions.
3. (a) $N = F(H)$
(b) There are only 30 species of birds at an elevation of 1,500 feet above sea level.
4. point-slope form: $y = 2.5x + 22.5$
slope-intercept form: $y - 10 = 2.5(x + 5)$
5. $y = -2.2x + 22$
6. (a) $m = \frac{-8}{5} = -1.6$
(b) $\frac{-J}{5}$
(c) $\frac{-J}{8}$
(d) y decreases by 3.2
7. (a) When the truck is 5 years old its values will be 14 thousand dollars.
(b) The **slope** says that the value of the chevy truck decreases by \$750 each year.
The **vertical intercept** says the initial value of the chevy truck is \$31,450 dollars.
8. (a) \$2.16
(b) \$2.09
(c) $t = 22$, i.e. January 13
 $t = 24$, i.e. January 15
9. $y = -3.6057x + 63.6584$
10. (a) $y = 8.5421x - 401.2325$
(b) the slope says that for an increase of one inch, the weight increases by 8.5421 pounds.
(c) 171.0882 pounds
(d) 74.4820 inches