Problem 1

The graph shows that as the weeks increase, the time decreases. **If time is decreasing, then speed is increasing.**

**Answer a**

Problem 2

Average Rate of Change

A(x) = f(b) – f(a) / b – a

(0 , 6) -> b = 6 , a = 0

N(6) = 90(.86)^6 + 69 = 105.4110512

N(0) = 90(.86)^0 +69 = 159

(105.4110512 – 159) / (6-0) = -8.93

**Answer a**

Problem 3

Find the Average Rate of Change for each one.

a) (2591.90 – 1172.00) / (60 – 10) = 28.398

b) (2990.0 – 1352.00) / (69 – 19) = 32.76

c) (3135.80 – 1770.80) / (72 – 36) = 37.9167

d) (3186 – 2591.90) / (73 – 60) = 45.7

**Answer d**