

**5-77. See below:**

a.  $-3.5, 1, 5.5, 10$

b. Evaluate the equation for  $n = 15$ .

c.  $t(n + 1) = t(n) + 4.5; t(1) = -3.5$

**5-78.**  $t(n) = 3n + 2; t(n + 1) = t(n) + 3; t(1) = 5$

**5-79. See below:**

a.  $16x^2 - 25$

b.  $16x^2 + 40x + 25$

**5-80. See below:**

a. 144, 156, 168, 180

b. 264 stamps.

c.  $t(n) = 12n + 120$

d.  $n = 31.67$  ; She will not be able to fill her book exactly, because 500 is not a multiple of 12 more than 120. The book will be filled after 32 months.

**5-81.** There is a weak, negative, linear association: as dietary fiber is increased, blood cholesterol drops. 20.25% of the variability in blood cholesterol can be explained by a linear association with dietary fiber.

**5-81. See below:**

a.  $10,000 + 1500m = 18,000 + 1300m$

b.  $m = 40$  months