7-106. $y = 7.68(2.5)^x$

7-107. See below:

a. 228 shoppers

b. 58 people per hour

c. at 3:00 p.m.

7-108. See below:

a. See table below. The two sequences are the same.

t	1	2	3	4
$t(n)$	12	36	108	324

b. The coefficient is the first term of the sequence, and the exponent is $n - 1$.

c. See table below. Yes, both forms create the same sequence.

t	1	2	3	4
$t(n)$	10.3	11.5	12.7	13.9

d. Because the coefficient is the first term of the sequence instead of the zeroth term. Dwayne subtracts one because his equation starts one term later in the sequence, so he needs to multiply or add n one less time.

7-109. $(3x - 2)^2 = 9x^2 - 12x + 4$

7-111. See below:

a. (–2, 5)

b. (1, 5)

c. (–12, 14)

d. (2, 2)