5-66. See below:

a. Yes, the 90^{th} term or $t(90) = 447$.

b. no

c. Yes, the 152^{nd}term or $t(152) = 447$.

d. no

e. No, $n = -64$ is not in the domain of a sequence.

5-67. Justifications vary.

5-68. See below:

a. 3, $t(n) = 3n + 1$

b. 5, $t(n) = 5n - 2$

c. -5, $t(n) = -5n + 29$

d. 2.5, $t(n) = 2.5n + 4.5$

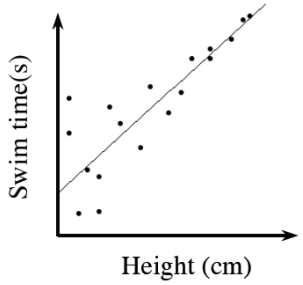
5-69. See below:

a. Descriptions vary, but students may say they are multiplying by 1.1 or growing by 10% each year.

b. \$88.58

5-70. See below:

a. Sample solution below. The y-intercept and slope could vary—the slope might even be negative—but the x-coordinates and the position of the points relative to each other are precise.



b. The model made predictions that were closer to the actual values for taller swimmers.

5-71. 88 feet