

1a) $P(n) = 1.8n + 2.9$

- b) 16.3 pounds
- c) 71.3 pounds
- d) 17.8 weeks
- e) 23.4 weeks

2a) $Y(n) = -1.3n + 289.3$

- b) 269.8 grams
- c) 94.3 grams
- d) about 153 rows
- e) 222 complete rows with a bit of yarn remaining

3a) $B(n) = 5.8n + 248$

- b) 422 followers
- c) 2,365 followers
- d) 43.4 days after Sep 13, so, about October 26 of this year
- e) 819 days after Sep 13, so around January of 2027

4a) $V(n) = 33500 - 240n$

- b) \$29,660
- c) \$10,460
- d) about 98 months (just over 8 years)
- e) about 140 months (about 12 years)

5a) $V(n) = 9.828 + 0.036n$

- b) 10.368 liters
- c) 13.968 liters
- d) 60.3°C
- e) 115.9°C
- f) -23°C

6a) $R(n) = 840 + 13n$ (values in thousands)

- b) 1,139,000 pounds
- c) 1,503,000 pounds
- d) 12.3 years, so about 2012
- e) 27.7 years, so about 2028