2.1 – R System Dynamics Tutorial 1 Answers

**Quick Review Question 1**

stock variables – *aspirin\_in\_plasma*

ordinary variables – *plasma\_volume*, *half\_life*, *elimination\_constant*

derived stock variables – *plasma\_concentration*

flows - *elimination*

**Quick Review Question 2**

**a.** 240 = 6 \* 40

**b.** iteration number: 2 through 241, inclusive

**c.** time: 0, 10/60, 20/60, …, 40

**d.** (i – 1) \* 10 minutes: 0, 10, 20, …, 2400 m

**e.** (i – 1) \* 10 / 60 hours: 0, 0.166667, 0.333333, …, 40 h

**Quick Review Question 3**

6 %% 3 is 0

7 %% 3 is 1

8 %% 3 is 2

9 %% 3 is 0

**Quick Review Question 4**

25, 49, 73, ……, 2 \* 12 \* *n* + 1, where *n* = 1, 2, 3, …