

Day 4 Answers

Rates in Context #1

- a. 20.051175
- b. -8.120 (or -8.119)
- c. Decreasing because....
- d. 23.347396

Rates in Context #2

- a. 76.570
- b. Decreasing because....
- c. Min at 3.271658
- d. 50

Rates in Context #3

- a. -24.588 (or -24.587)
- b. 825.551
- c. Decreasing because....
- d. Max of 635.376123

Rates in Context #4

- a. 980 people
- b. Max $t=1.362$ (or 1.363)
- c. 387.5
- d. .77551

Rates in Context #5

- a. 1411 tons
- b. $\frac{d^2W}{dt^2} = \frac{1}{625}(W - 300)$ Underestimate
- c. $W(t) = 300 + 1100e^{\frac{1}{25}t}$

Multiple Choice

- | | |
|-------|-------|
| 31. B | 36. B |
| 32. C | 37. B |
| 33. E | 38. B |
| 34. D | 39. B |
| 35. C | 40. A |