

Chapter 8 Review Answers

- 1) dependent
- 2) independent
- 3) dependent
- 4) independent

- 5) Two tail; $T_{cv} = +/- 2.306$; $t = -2.401$; Yes, the course has an effect on the SAT score
- 6) $(-0.0142, 0.01279)$; There is no difference between the batting average of the American and National League. Zero is in the confidence interval.
- 7) Left tail; $Z_{cv} = -2.326$; $z = -4.999$; Aspirin did reduce the number of heart attacks.
- 8) Left tail; $t = -1.057$; $p\text{-value} = .150$. The wait time at the Local Bank is not lower than the Competitor Bank.
- 9) two tail; $z = -3.991$; $p\text{-value} = 0.0000657$; There is a difference between the opinions of doctors of specialized medicine and general practitioners regarding government controlling health care.
- 10) $(-0.6977, 18,698)$; There is not a significant difference between Set A and Set B because zero is in the critical region.
- 11) two tail; $t_{cv} = +/- 2.145$; $t = -1.741$; There is no difference between the salaries of elementary school teachers in the two neighboring districts.
- 12) $(-0.1036, -0.0481)$; There is a significant difference between the obesity rates in 1994 and today. Zero is not in the confidence interval.
- 13) right tail; $T_{cv} = 2.821$; $t = 2.752$; The drug is not effective in lowering cholesterol.