

## Review for final exam ANS

- 1) mean:\_2 sd: 20.26 midrange:34 mode:\_there is no mode range: 52; median: 19, variance: 410.67
- 2) A
- 3) A
- 4) B
- 5) B
- 6) A
- 7) B
- 8) D
- 9) D
- 10) B
- 11) A
- 12) D
- 13) B
- 14) B
- 15) D
- 16) B
- 17) A
- 18) D
- 19) C
- 20) C
- 21) A
- 22) D
- 23) D
- 24) B
- 25) C
- 26) D
- 27) A
- 28) A
- 29) A
- 30) B
- 31) A
- 32) D
- 33) D
- 34) B
- 35) D
- 36) C
- 37) D
- 38) A
- 39) C
- 40) B
- 41) B
- 42) B
- 43) D
- 44) B
- 45) A
- 46) C

47) A

48) D

49) B

50)  $H_0: p = 0.11$ .  $H_1: p \neq 0.11$ . Test statistic:  $z = 4.61$ . P-value:  $p = 0.0001$ .

Critical values:  $z = \pm 1.96$ . Reject null hypothesis. There is sufficient evidence to warrant rejection of the claim that the proportion of all children in the town who suffer from asthma is 11%.

51)  $H_0: p = 0.5$ .  $H_1: p > 0.5$ . Test statistic:  $z = 0.99$ . P-value:  $p = 0.1611$ .

Critical value:  $z = 2.33$ . Fail to reject null hypothesis. There is not sufficient evidence to support the claim that more than half of all those using the drug experience relief.

52)  $H_0: \mu = 33.5$ .  $H_1: \mu \neq 33.5$ . Test statistic:  $t = 2.40$ . P value = 0.0310; Reject  $H_0$ . There is sufficient evidence to warrant rejection of the claim that the mean is 33.5

53)  $H_0: \mu = 14$  oz.  $H_1: \mu \neq 14$  oz. Test statistic:  $t = -2.36$ . P value 0.050. Fail to reject  $H_0$ . There is not sufficient evidence to warrant rejection of the claim that the mean weight is 14 ounces.