Lesson 12.2 Practice: Comparing Two Means

School Launch · Statistics · Unit 12: Comparing Two Groups · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Sample 1: $n = 20$, $\bar{x} = 79.1$, $s = 4.4$. Sample 2: $n = 14$, $\bar{x} = 57.2$, $s = 3.1$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). EASY

2. Sample 1: $n = 40$, $\bar{x} = 59.0$, $s = 6.9$. Sample 2: $n = 28$, $\bar{x} = 54.3$, $s = 5.9$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). EASY

3. Sample 1: $n = 12$, $\bar{x} = 78.2$, $s = 3.2$. Sample 2: $n = 33$, $\bar{x} = 60.8$, $s = 9.4$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). EASY

4. Sample 1: $n = 12$, $\bar{x} = 54.0$, $s = 9.5$. Sample 2: $n = 10$, $\bar{x} = 75.8$, $s = 11.0$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). MEDIUM

5. Sample 1: $n = 20$, $\bar{x} = 79.7$, $s = 10.4$. Sample 2: $n = 30$, $\bar{x} = 52.1$, $s = 6.8$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). MEDIUM

6. Sample 1: $n = 29$, $\bar{x} = 43.7$, $s = 10.3$. Sample 2: $n = 23$, $\bar{x} = 65.2$, $s = 5.9$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). MEDIUM

7. Sample 1: $n = 34$, $\bar{x} = 71.3$, $s = 10.7$. Sample 2: $n = 16$, $\bar{x} = 64.8$, $s = 10.1$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). MEDIUM

8. Sample 1: $n = 38$, $\bar{x} = 40.8$, $s = 3.5$. Sample 2: $n = 36$, $\bar{x} = 56.9$, $s = 9.4$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). HARD

9. Sample 1: $n = 19$, $\bar{x} = 60.2$, $s = 4.3$. Sample 2: $n = 13$, $\bar{x} = 47.2$, $s = 9.4$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). HARD

10. Sample 1: $n = 12$, $\bar{x} = 40.8$, $s = 9.7$. Sample 2: $n = 31$, $\bar{x} = 61.3$, $s = 9.2$. Find the standard error of $\bar{x}_1 - \bar{x}_2$ and the two-sample t (two decimals each). HARD