

## Answer Key and Resources for “Data Aggregation and Analysis”

Q#	Question	Correct Answer	Where can I find more Information?*
1	<i>You need to report outcomes and would like to combine (or aggregate) data across the four sites. However, each site is using a different instrument. What is the most important thing to consider?</i>	<b>The correct answer is: Do all the instruments collect information directly related to the anticipated outcome?</b>	If you have questions about aggregating data collected from different sites, contact Project STAR at 800-548-3656.
2	<i>You need to measure progress toward the outcome of “increased muscle strength”. Which of the following types of data should NOT be used in aggregation with the others for this outcome?</i>	<b>The correct answer is: Weekly tests of blood pressure levels.</b>	If you have questions about combining different types of data to measure an outcome, contact Project STAR at 800-548-3656.
3	<i>What is the best way to aggregate the following sets of data from two different sites? Site A: 24 out of 30 (80%) participants increased the amount of weight lifted by at least five pounds over six weeks. Site B: 6 out of 10 (60%) participants doubled the number of times they can lift the same amount of weight over six weeks.</i>	<b>The correct answer is:</b> Take both sets of raw numbers first, then calculate the percentage of participants across sites who were able to achieve the site-specific targets, and report: “30 out of 40 participants, or 75%, achieved their target toward increased muscle strength”.	Review the <i>Data Analysis Packet</i> for steps on analyzing particular Step 4 Tabulate your Data: <a href="http://nationalserviceresources.org/star/sc-analysis">http://nationalserviceresources.org/star/sc-analysis</a>

\*The recommended listings are materials developed by Project STAR. See The Resource Center ([www.nationalservice.gov/resources](http://www.nationalservice.gov/resources)) for additional resources.

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4	<p><i>You notice possible problems with four surveys that caregivers returned. Which of these surveys should you omit from the analysis?</i></p>	<p><b><i>The correct answers are: b and c only.</i></b></p> <p>b. The survey completed by a respondent who is a new client and has received only two visits to date.</p> <p>c. The survey in which the respondent most of the questions unanswered.</p>	<p>See the <i>Data Analysis Packet</i> for steps on analyzing, particular Step 2 Collect and Clean your Data:  <a href="http://nationalservicerresources.org/star/sc-analysis">http://nationalservicerresources.org/star/sc-analysis</a></p>
5	<p><i>View the completed survey turned in by one the caregivers. Which of the questions should you omit from the analysis; that is, consider it a “non-response”?</i></p>	<p><b><i>The correct answers are: questions #3 and #5.</i></b></p>	

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7	<i>A coding system is an organized way to substitute symbols (usually numbers) for data. Codes might look like which of the following?</i>	<b>The correct answer is: All of the above.</b> a. 1= “yes”; 2= “no”, 3= “don’t know” b. DR= medical doctor; RN= registered nurse c. Blue surveys for pre-tests and yellow surveys for post tests. d. Last four digits of participant social security numbers for identification e. Satisfaction scale of 1 to 5, where 1=“Very satisfied” and 5=“Very dissatisfied”	See the <i>Data Analysis Packet</i> for steps on analysis, particular Step 3 Determine a Coding System: <a href="http://nationalserviceresources.org/star/sc-analysis">http://nationalserviceresources.org/star/sc-analysis</a>
6	<i>Which of the following are benefits to creating codes for questionnaire items?</i>	<b>The correct answer is: All of the above.</b> a. To protect confidentiality b. To facilitate speedier data entry if you are using a spreadsheet c. To attach numbers to scale items so that they may be analyzed (e.g. “the average rating was high: 4.2 on a 5 point scale”) d. To calculate “scores” for comparison purposes	See the <i>Data Analysis Packet</i> for steps on analysis, particular Step 3 Determine a Coding System: <a href="http://nationalserviceresources.org/star/sc-analysis">http://nationalserviceresources.org/star/sc-analysis</a>
8	<i>You used a reading pre-post test to measure outcomes at your tutoring program. Because many of the children have shown remarkable progress, you are surprised by the low gain scores indicated by the reading post test. Where might you look to determine what went wrong?</i>	<b>The correct answer is: All of the above.</b> a. Was the test administered properly, in a quiet environment, with instructions given correctly? b. Did the children attend the minimum number of hours needed to show the level of progress you expected? c. Did the test measure material that was covered during tutoring sessions? d. Did children do so well on the pre-test that there was no room for gain on the post test?	If you have questions about interpreting data that doesn’t seem quite right, call Project STAR at 800-548-3656.

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9	<p><i>Looking more closely at the preliminary data analysis, you can see that most of the students with lower scores are learning English as their second language. Their teacher tells you that it is not unusual for these students to experience a temporary drop in reading ability as they are learning spelling and grammar. You now face a new decision: can you analyze and report this population differently?</i></p>	<p><b><i>The correct answer is:</i></b>  Yes, but not in your report on the target. Unless you had previously indicated in your target statement that you would treat these groups differently, you must include all students. However, any additional information that sheds light on the meaning of the results should also be reported.</p>	<p>For more information on performance measurement reporting requirements, see the tutorial, <i>Completing the Work Plan Section of the Progress Report</i>:  <a href="http://nationalserviceresources.org/star/sc-tutorials">http://nationalserviceresources.org/star/sc-tutorials</a></p>

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10	<p><i>If the target says: b. Sixty-five percent of the seniors who received in-home visits at least 36 hours per month will still be living in their own homes six months later.</i></p>	<p><b>The correct answer is: You will need to...</b> Look at the “dosage” of service in addition to the beneficiary’s situation.</p>	<p>Review the <i>Data Analysis Packet</i> for steps on analysis, particular Step 1 (Start with a Plan); Step 4 (Tabulate y Data); and Step 5 (Transfer your Information): <a href="http://nationalservicerresources.org/star/sc-analysis">http://nationalservicerresources.org/star/sc-analysis</a></p> <p>For step by step instructions for analyzing data to respond to a target, see any of the sample instrument “mini-packets” located here: <a href="http://nationalservicerresources.org/star/sc-instrument-packets">http://nationalservicerresources.org/star/sc-instrument-packets</a></p>
11	<p><i>If the target says: Seventy percent of blood donors surveyed will say they were “very satisfied” with their experience in at least three of five areas.</i></p>	<p><b>The correct answer is: You will need to...</b> Look at responses to all survey items to determine whether individuals met the target.</p>	<p>For example, <i>Tax Counseling Programs Taxpayer Client Survey</i> demonstrates how to analyze several survey items to respond to a target.</p>
12	<p><i>If the target says: Eighty percent of students will show a gain of at least 20 points on their GED practice tests after six weeks.</i></p>	<p><b>The correct answer is: You will need to...</b> Match individual pre and post tests and calculate the difference in scores for each student, from pre to post test.</p>	<p>Larger instrument packets with step-by-step analysis for output and outcome instruments are located here: <a href="http://nationalservicerresources.org/star/sc-instrument-packets">http://nationalservicerresources.org/star/sc-instrument-packets</a></p> <p>For example, the <i>Food Distribution Packet</i> analyzes pre-post data to respond to a particular target.</p>
13	<p><i>If the target says: Sixty percent of the mentored youth will increase at least one level on a 4-point response scale, from pre to post survey, in at least three areas.</i></p>	<p><b>The correct answer is: You will need to...</b> Match individual pre and post surveys, compare each pre-post survey item, and determine whether the minimum level of gain was made on the minimum number of survey items.</p>	