

Chapter 3 Problem Wrap-Up

Student Text Page

193

Suggested Timing

40–80 min

Tools

- graphing calculators
- computers with spreadsheet software

Related Resources

BLM 3-15 Chapter 3 Problem Wrap-Up Rubric

Using the Chapter Problem

Teaching Suggestions

- Have students read the Chapter Problem Wrap-Up and ensure they understand what they are being asked to do. Relate the Chapter Problem revisits to the Chapter Problem Wrap-Up scenario.
- Students will need the information they gathered in sections 3.2 to 3.4. You may decide to provide common survey data for all students to make the assessment more equitable and easier to manage.
- Have students work in groups to brainstorm the strategies involved in completing the problem. Discuss, as a class, the strategies and review necessary skills and concepts for solving the Chapter Problem.
- Circulate as students complete the Chapter Problem and assist them as necessary. More polished solutions will be created if students have additional time.
- If you assigned the Chapter Problem revisits section by section, the Chapter Problem Wrap-Up can be used as part of a summative assessment.
- If you are assigning the Chapter Problem as a whole at the end of the chapter, you can use it as part of a summative assessment or as a formative assessment prior to a Chapter Test or Task.

Level 3 Sample Response

The correlation coefficient is $r = 0.054$, so the line of best fit is not applicable to the data. If there is a cause and effect relationship, it is not linear. Internet use appears to increase to age 20, then decrease until age 30, then increase again to age 50, then decrease. There are outliers at age 37 and age 63. A larger sample is needed to get a clearer idea of the relationship between age and Internet use. My conclusion is that there is not enough information to assume a cause and effect relationship between age and Internet use.

Level 3 Notes

Look for the following:

- all outliers are identified with some justification
- cause and effect relationship is discussed with some justification
- two-variable statistical summaries are provided with commentary
- bias is discussed
- clear conclusions are drawn from the data

What Distinguishes Level 2

Look for the following:

- some outliers are identified
- cause and effect relationship is discussed with little justification
- two variable statistical summaries are provided with little or no commentary
- bias is not observed or discussed
- some conclusions are drawn from the data; conclusions might be faulty

What Distinguishes Level 4

Look for the following:

- all outliers are identified with complete justification
- cause and effect relationship is discussed with justification
- two-variable statistical summaries are provided with thorough commentary
- bias is discussed thoroughly with suggestions for improvements
- conclusions are drawn from the data with complete justification

Summative Assessment

- Use **BLM 3-15 Chapter 3 Problem Wrap-Up Rubric** to assess student achievement.