**General Overview**

**Assessment Model:** CP 201  
**Program connections:** Core Plus Mathematics Project  
Course 2 Unit 1  
**Created:** Summer 2005

All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

**Connections to Learning Target(s):**
- Foundation Level 1 – Target 2  
- Foundation Level 2 –

**Connections to State Content Standards:**
- A: Mathematical Processes  
- B: Number Operations and Relationships  
- F: Algebraic Relationships

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**Item(s) Overview**

**Key:** CP 201

**Target connections** - Assessable specifications by Learning Targets:
- (1) Foundation Level 1 – Targets 2.1, 2.2, 2.5, 2.9  
- Foundation Level 2 –
- (2) Foundation Level 1– Targets 2.1, 2.2, 2.5, 2.9  
- Foundation Level 2 –

**State Performance Standards:**
- (1) A1, A5, B4, F2, F3, F4  
- (2) A1, A5, B4, F2, F3, F4

**Comments:**
## General Overview

**Assessment Model:** CP 202

**Program connections:** Core Plus Mathematics Project
Course 2 Unit 2

**Created:** Summer 2005

All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

### Connections to Learning Target(s):

- Foundation Level 1 – Target 2
- Foundation Level 2 – Targets 2, 3, 4, 5

### Connections to State Content Standards:

- B: Number Operations and Relationships
- C: Geometry
- F: Algebraic Relationships

## Item(s) Overview

**Key:** CP 202

### Target connections - Assessable specifications by Learning Targets:

1. Foundation Level 1 – Foundation Level 2 – Targets 2.3, 2.4, 2.7, 2.9, 3.5, 5.3
2. Foundation Level 1– Foundation Level 2 – Targets 3.8 4.7
3. Foundation Level 1– Target 2.5
   - Foundation Level 2 –

### State Performance Standards:

1. C1, C2
2. B2, C1, C2
3. F2, F3

### Comments:
General Overview
Assessment Model: CP 203
Program connections: Core Plus Mathematics Project
Course 2 Unit 3
Created: Summer 2005
All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

Connections to Learning Target(s):
  Foundation Level 1 – Target 3
  Foundation Level 2 –

Connections to State Content Standards:
  E: Statistics and Probability

Item(s) Overview
Key: CP 203
Target connections - Assessable specifications by Learning Targets:
  (1) Foundation Level 1 – Targets 3.2, 3.3, 3.4
  Foundation Level 2 –

State Performance Standards:
  (1) E3

Comments:
The following table and scatterplot contains data on 30 ninth grade students at Banneker High School.

<table>
<thead>
<tr>
<th>Cumulative Grade Point Average</th>
<th>Number of Office Referrals (in one year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.333</td>
<td>2</td>
</tr>
<tr>
<td>0.692</td>
<td>7</td>
</tr>
<tr>
<td>0.773</td>
<td>1</td>
</tr>
<tr>
<td>0.773</td>
<td>4</td>
</tr>
<tr>
<td>1.103</td>
<td>6</td>
</tr>
<tr>
<td>1.107</td>
<td>5</td>
</tr>
<tr>
<td>1.167</td>
<td>0</td>
</tr>
<tr>
<td>1.357</td>
<td>3</td>
</tr>
<tr>
<td>1.385</td>
<td>0</td>
</tr>
<tr>
<td>1.417</td>
<td>4</td>
</tr>
<tr>
<td>1.500</td>
<td>8</td>
</tr>
<tr>
<td>1.929</td>
<td>0</td>
</tr>
<tr>
<td>1.929</td>
<td>0</td>
</tr>
<tr>
<td>2.143</td>
<td>0</td>
</tr>
<tr>
<td>2.143</td>
<td>0</td>
</tr>
<tr>
<td>2.250</td>
<td>0</td>
</tr>
<tr>
<td>2.357</td>
<td>2</td>
</tr>
<tr>
<td>2.500</td>
<td>2</td>
</tr>
<tr>
<td>2.500</td>
<td>0</td>
</tr>
<tr>
<td>2.500</td>
<td>0</td>
</tr>
<tr>
<td>2.500</td>
<td>1</td>
</tr>
<tr>
<td>2.539</td>
<td>0</td>
</tr>
<tr>
<td>2.643</td>
<td>0</td>
</tr>
<tr>
<td>2.714</td>
<td>0</td>
</tr>
<tr>
<td>2.714</td>
<td>0</td>
</tr>
<tr>
<td>2.857</td>
<td>2</td>
</tr>
<tr>
<td>2.857</td>
<td>0</td>
</tr>
<tr>
<td>3.375</td>
<td>7</td>
</tr>
<tr>
<td>3.571</td>
<td>0</td>
</tr>
</tbody>
</table>

a. Calculate the correlation coefficient between the cumulative GPA and the number of office referrals.

b. Describe the correlation between the cumulative GPA and the number of office referrals.

c. Is there a cause-and-effect relationship between a student’s GPA and the number of office referrals?

d. Find the equation of the least-squares regression line. Graph this line on the plot.

e. Does the least-squares regression line model this data well?
f. Verify that the centroid is on the least-squares regression line.

g. Predict how many office referrals a student with a 4.0 GPA would be expected to receive. Is it appropriate to use the least-squares regression equation to estimate this?

h. What effect would removing the outlier at (3.375, 7) have on the correlation coefficient?

i. What effect would removing the outlier at (3.375, 7) have on the least-squares regression line?
General Overview
Assessment Model: CP 204
Program connections: Core Plus Mathematics Project
Course 2 Unit 4
Created: Summer 2005
All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

Connections to Learning Target(s):
- Foundation Level 1 – Targets 2, 4, 5, 9
- Foundation Level 2 – Target 4

Connections to State Content Standards:
- A: Mathematical Process
- D: Measurement
- E: Statistics and Probability
- F: Algebraic Relationships

Item(s) Overview
Key: CP 204
Target connections - Assessable specifications by Learning Targets:
1. Foundation Level 1 – Foundation Level 2 – Target 4.7
2. Foundation Level 1 – Targets 4.1, 4.9, 5.3, 5.6, 5.8, 5.9
   Foundation Level 2 –
3. Foundation Level 1 – Targets 2.7, 4.9, 5.10
   Foundation Level 2 –
   Foundation Level 2 –

State Performance Standards:
1. A1, A5, D3
2. A1, D1, D3, E1, F2
3. A1, D1, D3, E1, F2
4. A1, D3

Comments:
## General Overview

**Assessment Model:** CP 206  
**Program connections:** Core Plus Mathematics Project  
Course 2 Unit 6  
**Created:** Summer 2005  
All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

### Connections to Learning Target(s):
- Foundation Level 1 – Target 2
- Foundation Level 2 – Targets 4, 6, 8

### Connections to State Content Standards:
- A: Mathematical Process  
- B: Number Operations and Relationships  
- C: Geometry  
- D: Measurement  
- F: Algebraic Relationships

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## Item(s) Overview

**Key:** CP 206  
**Target connections -** Assessable specifications by Learning Targets:

1. Foundation Level 1 – Foundation Level 2 – Targets 4.6, 4.7, 8.1, 8.8
2. Foundation Level 1 – Foundation Level 2 – Targets 7.2, 8.8
3. Foundation Level 1 – Foundation Level 2 – Targets 6.2, 6.3, 6.6, 6.8
4. Foundation Level 1 – Target 2.2  
   Foundation Level 2 –
5. Foundation Level 1 – Target 2.2  
   Foundation Level 2 –
6. Foundation Level 1 – Foundation Level 2 – Target 6.8

### State Performance Standards:
- (1) A1, C1, C5, D3  
- (2) A1, A5, C5, F4  
- (3) C5  
- (4) C2  
- (5) D3  
- (6) C2, C5, F4

**Comments:**
General Overview
Assessment Model: CP 207
Program connections: Core Plus Mathematics Project
Course 2 Unit 7
Created: Summer 2005
All references to the following Learning Targets and State Assessment Framework Descriptors represent partial development.

Connections to Learning Target(s):
  Foundation Level 1 – Target 8
  Foundation Level 2 –

Connections to State Content Standards:
  E: Statistics and Probability

Item(s) Overview
Key: CP 207
Target connections - Assessable specifications by Learning Targets:
  (1)  Foundation Level 1 – Targets 8.4, 8.9
       Foundation Level 2 –
  (2)  Foundation Level 1 – Targets 8.5, 8.7, 8.8
       Foundation Level 2 –

State Performance Standards:
  (1) E5
  (2) E5

Comments: