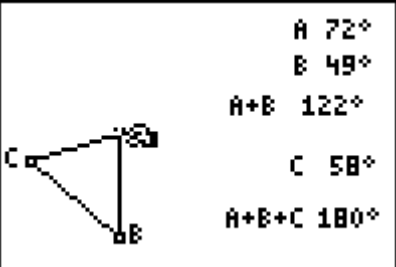


## Teacher Notes

G.G.30 Investigate, justify, and apply theorems about the sum of the measures of the angles of a triangle

### Lesson Launcher Objectives:

1) Discover that the sum of the angles of a triangle is 180 degrees.

<p>The student will open the APPVAR ASUM2</p>  <p>A 72° B 49° A+B 122° C 58° A+B+C 180°</p>	<p>As the student selects, grabs and drags the vertices of triangle ABC they will be able to draw a conclusion from their exploration.</p>
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- 1) As you dragged vertex A what measure(s) were changing? **The measures of the angles and the sum A+B**
- 2) As you dragged vertex A what measure(s) remained the same? **The sum A+B+C was always 180.**
- 3) Press CLEAR and select vertex B to drag. As you dragged vertex B what measures were changing? **The measures of the angles and the sum A+B**
- 4) As you dragged vertex B what measures remained the same? **The sum A+B+C was always 180.**
- 5) Press CLEAR and select vertex C to drag. As you dragged vertex C what measures were changing? **The measures of the angles and the sum A+B**
- 6) As you dragged vertex C what measures remained the same? **The sum A+B+C was always 180.**
- 7) From your observations and answers to the previous questions what seems to be true regarding the sum of the angles of a triangle? **180 degrees**
- 8) Write a statement which summarizes your observations. **The sum of the angles of a triangle is 180 degrees.**