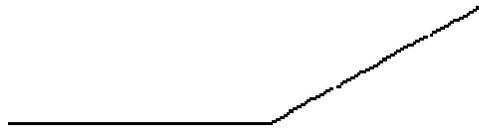


In the space below, draw an angle that is larger than 90° .

Scoring Guide

Solution:

Any obtuse angle, such as:



OR



Score & Description

Correct #1

Correct response—any obtuse angle

Correct #2

Any closed figure that contains at least one obtuse angle. The obtuse angle does not need to be designated

Incorrect

Any incorrect response—includes straight line with no vertex indicated

In this question the student was asked to draw an angle that is larger than 90° (an obtuse angle). Full credit was earned for a drawing of either an obtuse angle or a closed figure containing an obtuse angle.

*The use of more than one correct category in this question enabled NAEP to gather data on different ways students responded correctly to this question. Any one of these responses that fell into one of these correct categories earned full credit.

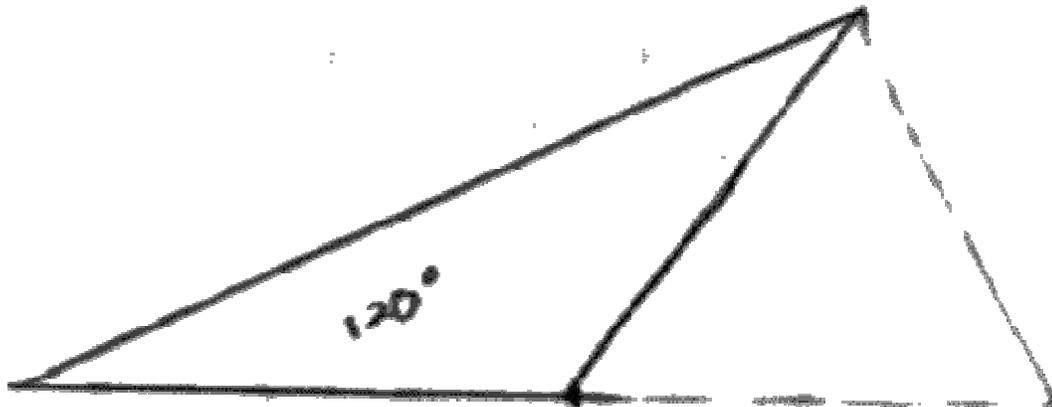
Correct #1 - Student Response

In the space below, draw an angle that is larger than 90° .



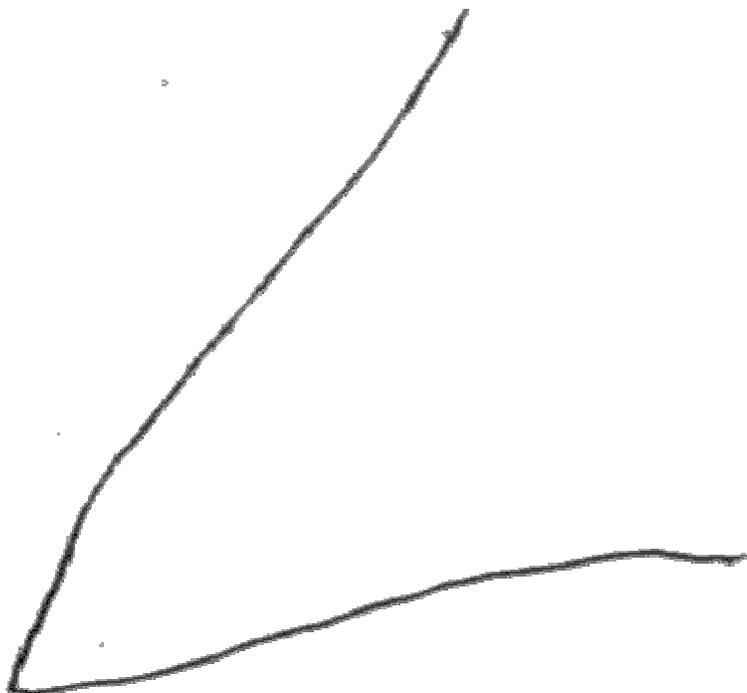
Correct #2 - Student Response

In the space below, draw an angle that is larger than 90° .

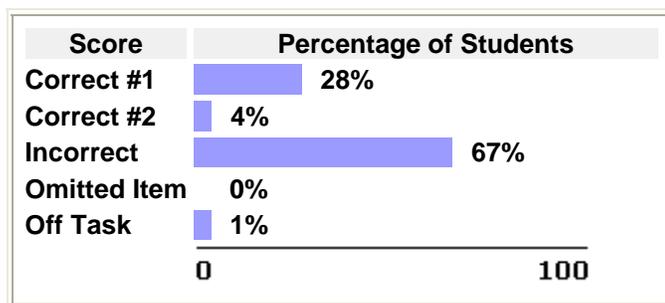


Incorrect - Student Response

In the space below, draw an angle that is larger than 90°.



2003 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentage may not add to 100 due to rounding.

Mathematical Content Area

Geometry and spatial sense

This question was classified in the geometry and spatial sense content area. This content area extends beyond the low-level identification of geometric shapes to students' understanding of combinations of those shapes (including transformations at grade 12). Students are expected to show knowledge of informal constructions, demonstrations (including drawing representations), justifications, and reasoning in both formal and informal settings. Proportional thinking applied to similar figures (grades 8 and 12) and indirect measurement are an important connection in this area.

Mathematical Ability

Problem solving

This question measures students' problem solving ability. Students demonstrate problem solving in mathematics when they recognize and formulate problems; determine the consistency of data; use strategies, data, models; generate, extend, and modify procedures; use reasoning in new settings; and judge the reasonableness and correctness of solutions. Problem solving situations require students to connect all of their mathematical knowledge of concepts, procedures, reasoning, and communication skills to solve problems.