

Algebra/Data Analysis Toolkit: Indicator 1.1.1

Student Handout: Algebra/Data Analysis: Indicator 1.1.1

Goal 1.0 Functions and Algebra

Expectation 1.1 The student will analyze a wide variety of patterns and functional relationships using the language of mathematics and appropriate technology.

Indicator 1.1.1 The student will recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically, and/or geometrically.

Assessment Limits:

The given pattern must represent a relationship of the form $y = mx + b$ (linear), $y = x^2 + c$ (simple quadratic), $y = x^3 + c$ (simple cubic), simple arithmetic progression, or simple geometric progression with all exponents being positive.

The student will not be asked to draw three-dimensional figures.

Algebraic description of patterns is in indicator 1.1.2

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Algebra/Data Analysis Indicator 1.1.1

Look at the pattern below.

2.6, -5.2, 10.4, -20.8, . . .

If this pattern continues, what is the sixth term?

- A. -83.2
- B. -41.6
- C. 41.6
- D. 83.2

Correct Answer

- A. -83.2

Item

Look at the pattern below.

$2.6, -5.2, 10.4, -20.8, \dots$

If this pattern continues, what is the sixth term?

- A. -83.2
- B. -41.6
- C. 41.6
- D. 83.2