Montana Comprehensive Assessment System *(MontCAS, Phase 2)*

Criterion-Referenced Test (CRT)

COMMON CONSTRUCTED-RESPONSE ITEM RELEASE
MATHEMATICS, GRADE 6

2008

OPI

OFFICE OF PUBLIC INSTRUCTION

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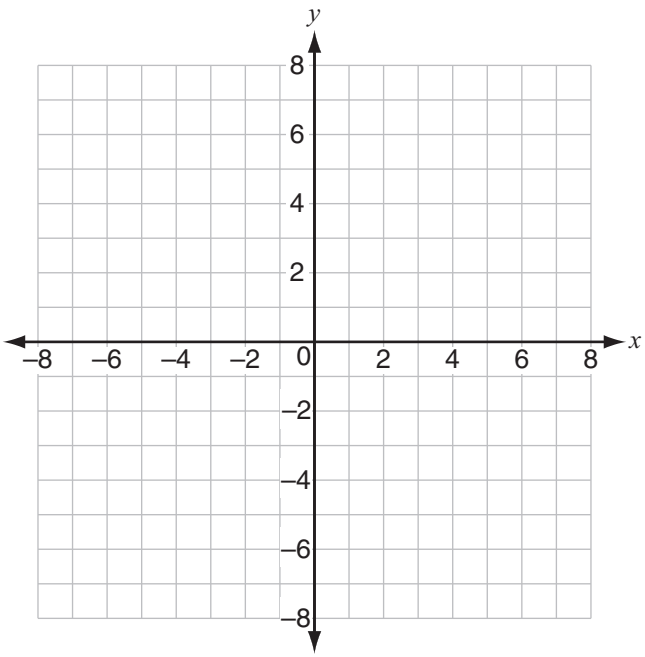
Mathematics

Session 1 (No Calculator)

You may NOT use a calculator during this session.

Write your answer in the space provided for it in your Student Response Booklet. Show all of your work.

23. **Copy and label** the coordinate grid below on the grid in your Student Response Booklet.



a. These are the coordinates of $\triangle MNP$.

- M (4, –5)
- N (2, –2)
- P (6, 0)

Draw and **label** $\triangle MNP$ on the coordinate grid in your Student Response Booklet.

b. On the same coordinate grid, translate (slide) $\triangle MNP$ 1 unit left and 6 units up.

- **Draw** the translated triangle.
- **Label** the vertices RST.

c. On the same coordinate grid, reflect (flip) $\triangle RST$ over the y-axis.

- **Draw** the reflected triangle.
- **Label** the vertices XYZ.

Scoring Guide

Score	Description
4	9 points
3	7–8 points
2	4–6 points
1	1–3 points
0	0 points
Blank	No response.

Scoring Notes

Part a: 3 points for correct answers, **see sample response**

OR

1 point for each correctly plotted vertex of the triangle

Part b: 3 points for correct answers, **see sample response (3, 1), (1, 4), (5, 6)**

OR

1 point for each correctly plotted vertex of the triangle

Part c: 3 points for correct answers, **see sample response (–3, 1), (–5, 6), (–1, 4)**

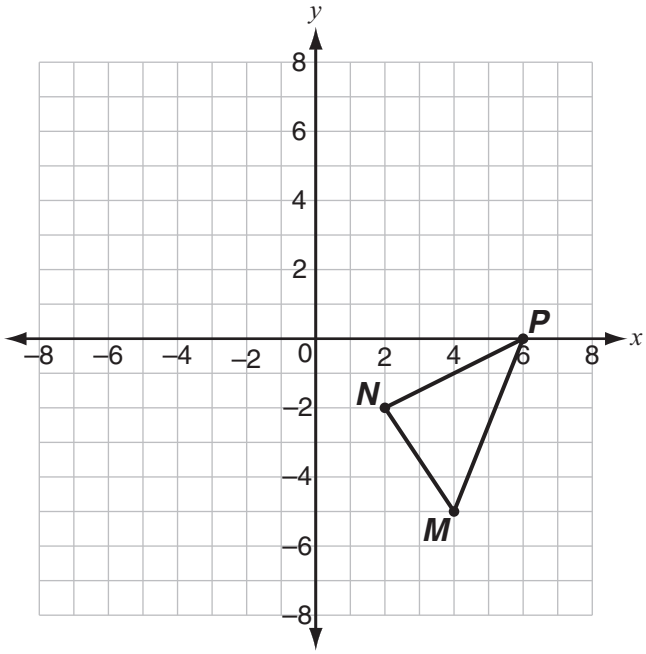
1 point for each vertex correctly reflected over the *y*-axis

or

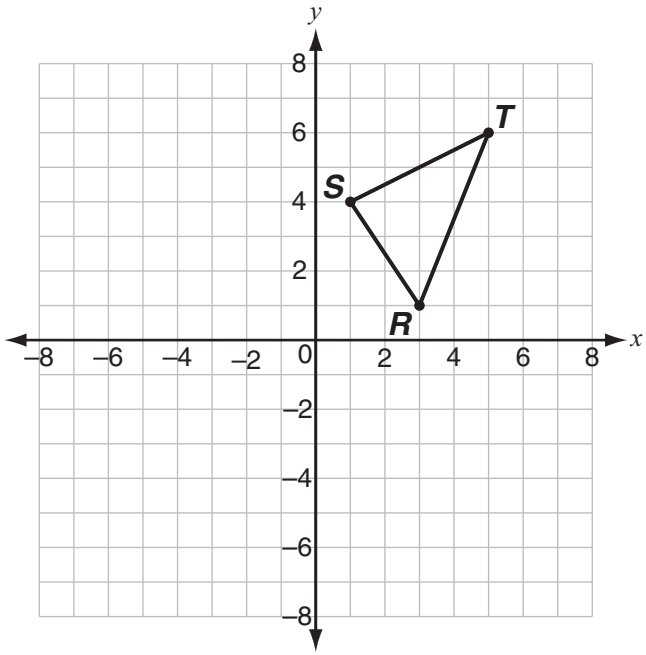
1 point for correctly reflecting **all** vertices over the *x*-axis

Sample Response:

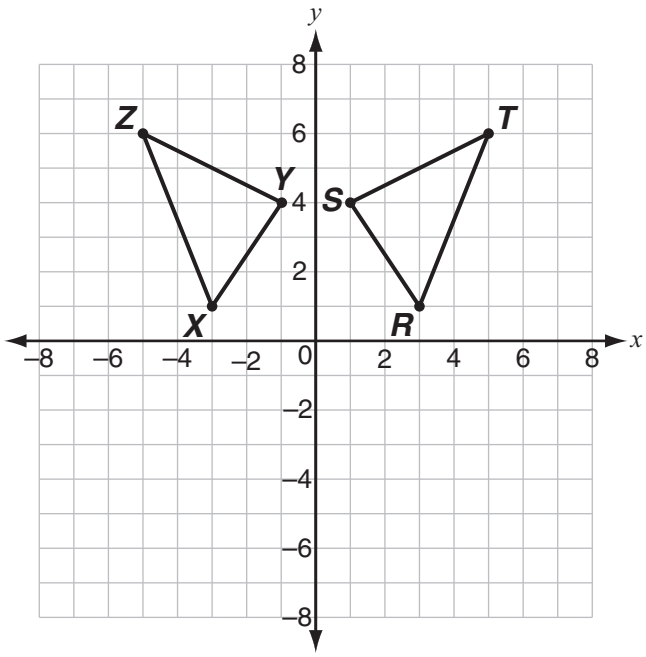
Part a:



Part b:

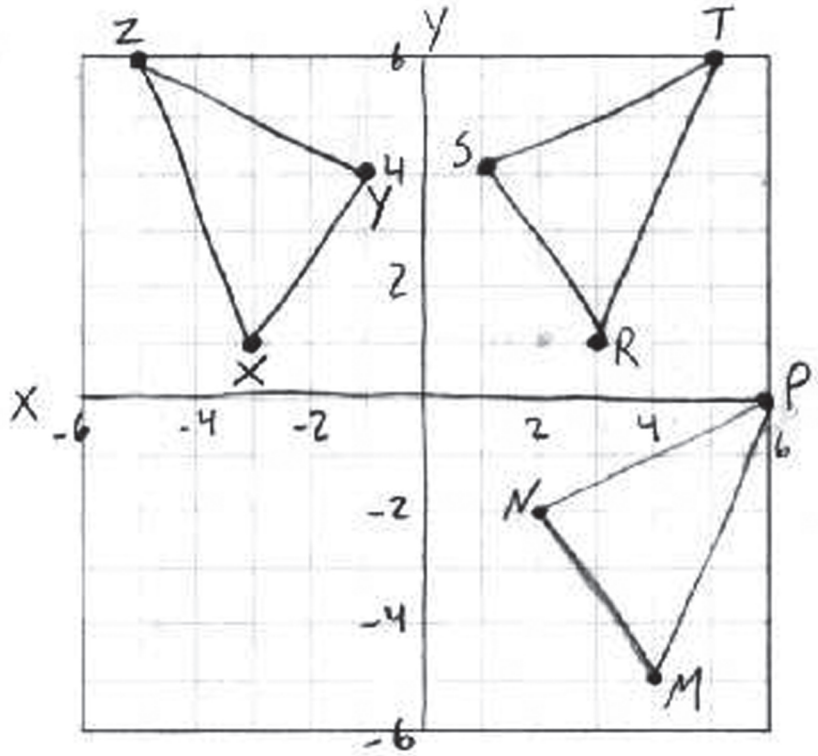


Part c:



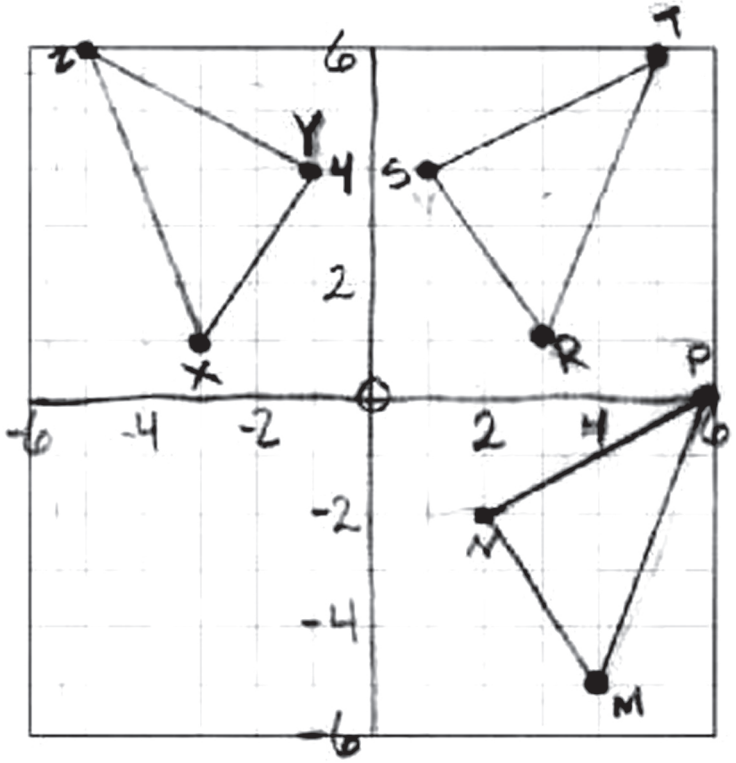
Score Point 4

Sample 1



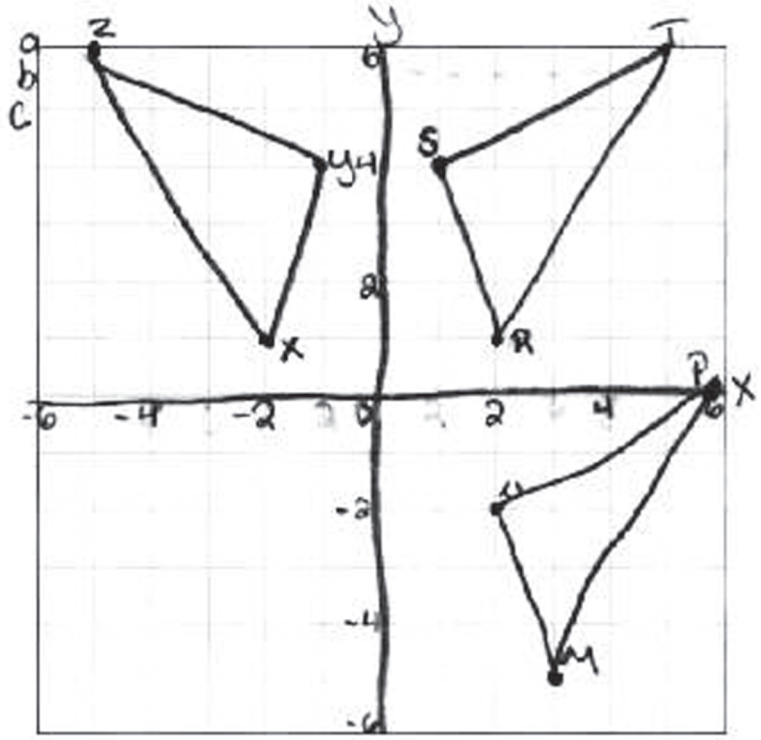
Score Point 4

Sample 2



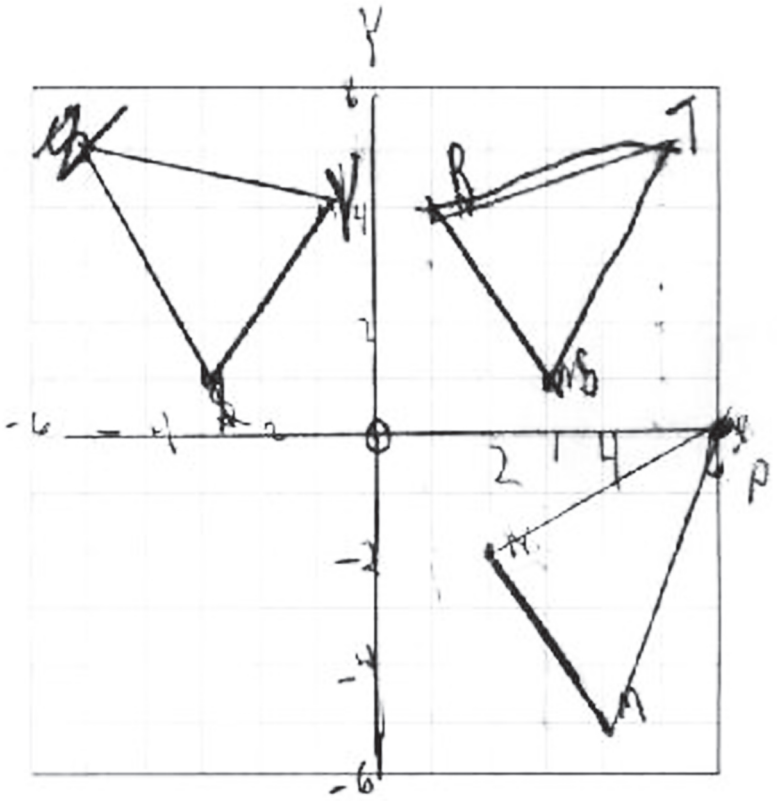
Score Point 3

Sample 1



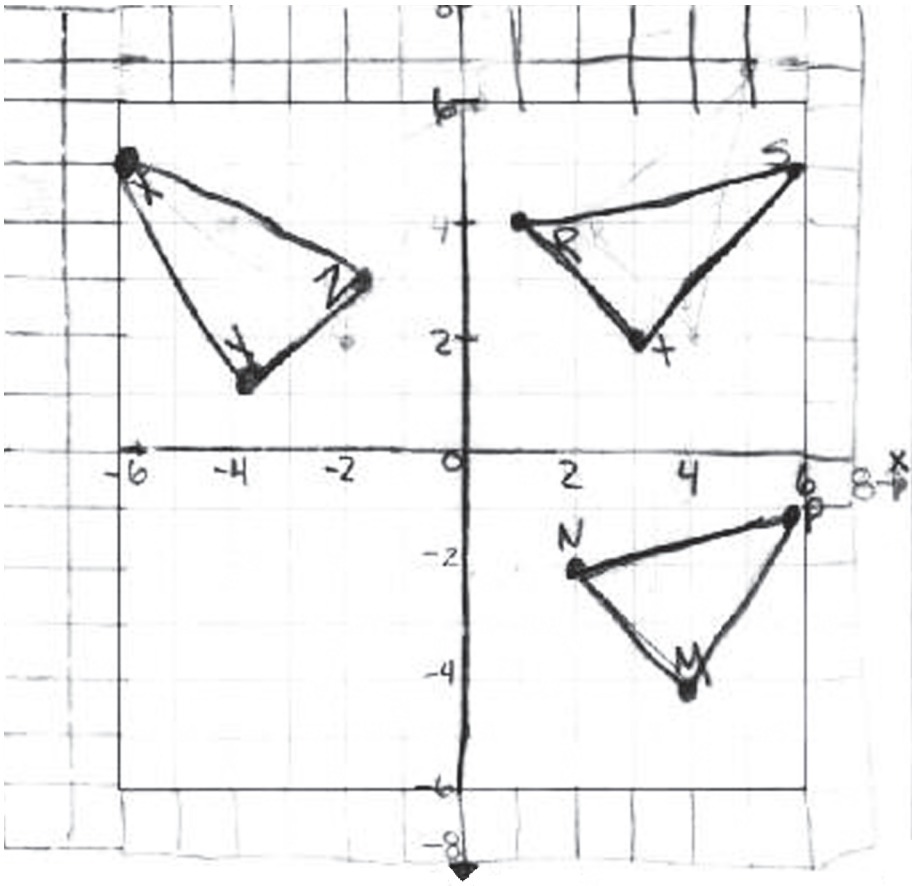
Score Point 3

Sample 2



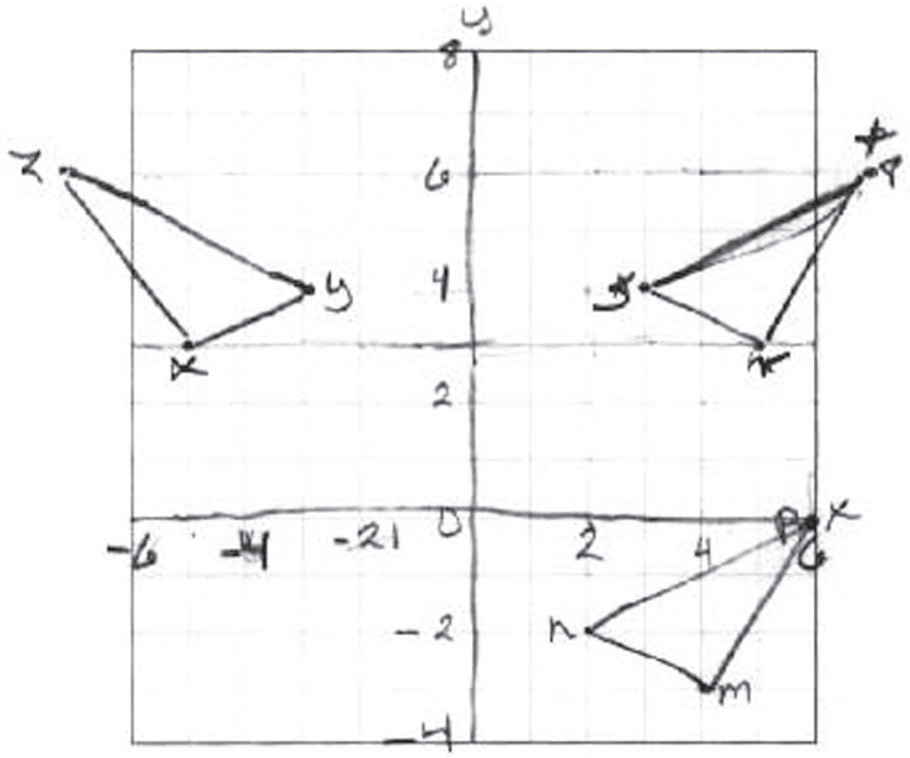
Score Point 2

Sample 1



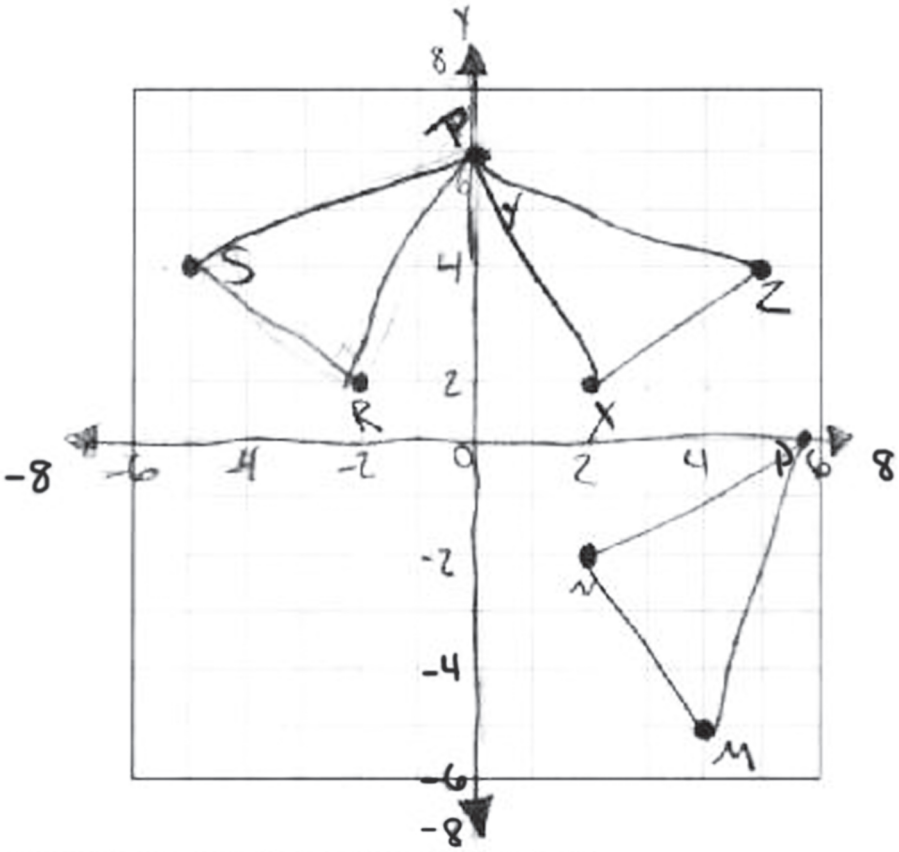
Score Point 2

Sample 2



Score Point 2

Sample 3



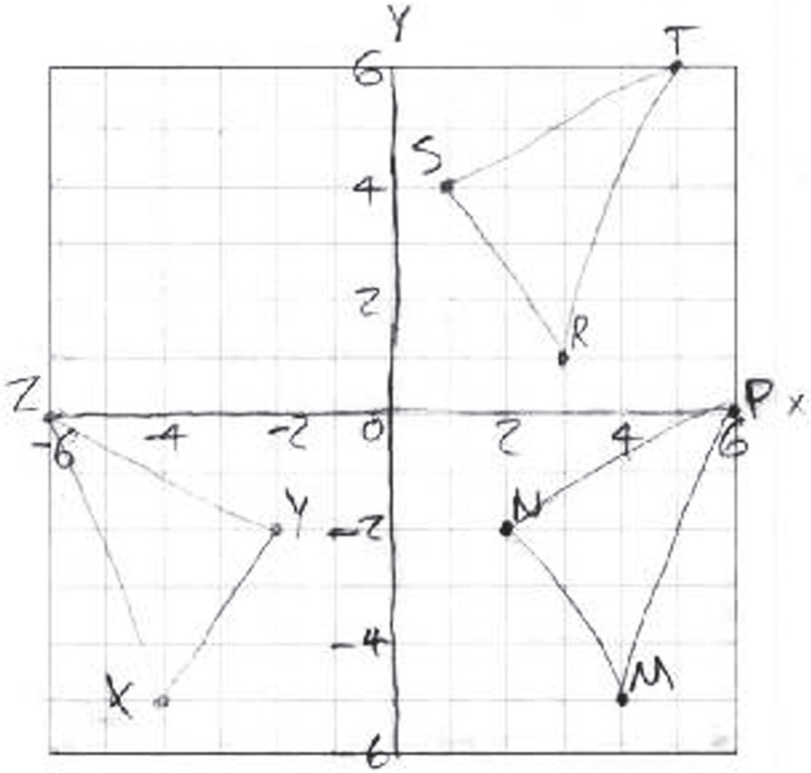
Score Point 2

Sample 4

A. They're the dark dots: •

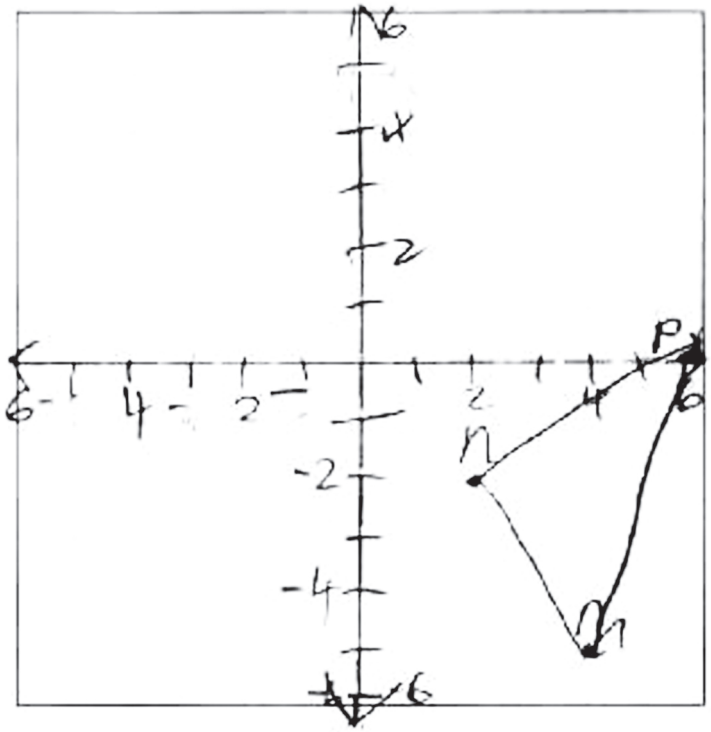
B. They're the medium dots: •

C. They're the light dots: •



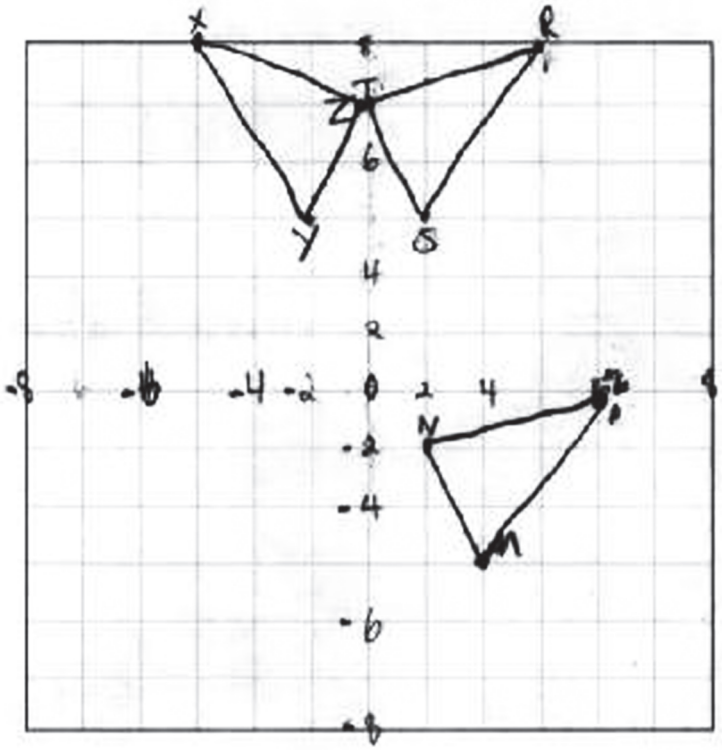
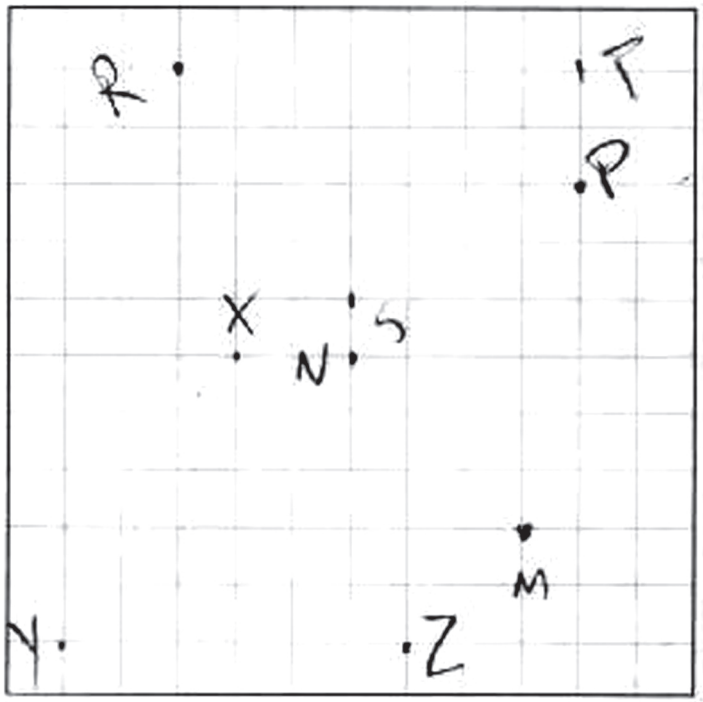
Score Point 1

Sample 1



Score Point 1

Sample 2



Score Point 0