



The following page includes the answer key for all machine-scored items, followed by the rubric for the hand-scored item.

- The rubric shows sample student responses. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item.
- In items where the scores are awarded for full and partial credit, the definition of partial credit will be confirmed during range-finding (reviewing sets of real student work).
- If students make a computation error, they can still earn points for reasoning or modeling.

Unit 1

Item Number	Answer Key	Evidence Statement Key/Content Scope
1. VR105511	D	8.SPA.2
2. VR105512	A, B, E	8.NS.A.1
3. VR109815	C, D, G	8.G.A.5
4. VR109816	A	8.EE.C.7a

Unit 2

Item Number	Answer Key	Evidence Statement Key/Content Scope
1. VR105518	C	8.F.B.4
2. VR109818	180	8.G.B.7
3. VR109823	0	8.EE.C.8b-1
4. VR109824	A, D	8.F.A.2
5. VR109826	D	8.G.B.6
6. VR105527	See rubric	8.R.1e

Rubric starts on the next page.

Model solution	
	<p>Model solution</p> <p>Part A:</p> <p>Linda’s claim is incorrect because she said the slope is run over rise. The slope is actually rise over run or the change in y over the change in x.</p> <p>The slope of \overline{PR} is $-\frac{2}{3}$ because $\frac{3-(-1)}{-3-3} = \frac{4}{-6} = -\frac{2}{3}$.</p> <p>Part B:</p> <p>Triangles MNP and QRT are similar because the corresponding angles at N and R and the corresponding angles at P and T are congruent, since they are corresponding angles where two parallel lines are intersected by a transversal. Because the triangles are similar, the ratios of corresponding sides of the triangles are equal.</p> <p>This means $\frac{MN}{NP} = \frac{QR}{RT}$, and shows that the slopes of NP and RT are equal.</p> <p>Scoring</p> <p>A complete response consists of the following four components:</p> <ul style="list-style-type: none"> • A correct explanation of the error in Linda’s claim in Part A. • A correct calculation and identification of the slope in Part A. • A correct reasoning about the slopes being equal, which includes the fact that the triangles are similar in Part B. • A correct reasoning about the slopes being equal because the ratios are equal, which includes the fact that the ratios of corresponding sides of the triangles are equal in Part B. <p>Note: If the response to Part B only contains calculations of the slopes of the segments without using the similar triangle concept, both points may be awarded as long as both slopes are calculated correctly.</p>
4	The response includes the four components listed above.
3	The response includes three of the four components listed above.
2	The response includes two of the four components listed above.
1	The response includes one of the four components listed above.
0	The response includes none of the four components listed above.