

Annotation Form

Anchor Set
KY 2022 Operational Math Grade 8
MA0820071
Geometric transformations

Paper	Doc ID	Score	Notes
A101	AAAYIP1382 0000573226	2	<p>Anchor Paper 1 Score Point 2 This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (First, Reflect over the X axis. Next, reflect over the Y axis. Lastly, transition all points... to the right by +1).
A102	AAAYIP1382 0000640761	2	<p>Anchor Paper 2 Score Point 2 This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (rotate 180° clockwise... translated right one unit).

Paper	Doc ID	Score	Notes
A103	AAAYIP1382 0000588359	2	<p>Anchor Paper 3 Score Point 2</p> <p>This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (reflect over the y axis. Translate to the right one... translate down 6 units). <p>Note: While this sequence only works if one were to start with figure T and neither figure is named as the starting point or end point, benefit of doubt should be given in the response's favor—if no starting figure is indicated and the given sequence would work with either figure as the starting point, the response should be awarded full credit.</p>
A104	AAAYIP1382 0000463621	1	<p>Anchor Paper 4 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (R reflect off the y axis, then reflect figure R off the x axis then, translate every point... up 1 unit). The final move should have been a translation to the right 1 unit, rather than up 1 unit. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>

Paper	Doc ID	Score	Notes
A105	AAAYIP1382 0000303666	1	<p>Anchor Paper 5 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (rotate 180°). The translation to the right one unit is missing from the transformation sequence. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>
A106	AAAYIP1382 0000043260	1	<p>Anchor Paper 6 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (translate down 5 then reflect over the y axis). The given transformation lacks the translation to the right one unit. If this sequence was applied to Figure T the figure would end up in the same quadrant as Figure R. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>
A107	AAAYIP1382 0000524157	0	<p>Anchor Paper 7 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that this response does not identify what Figure R is being reflected over or which direction the second translation would take (reflect figure R, slide up 3, and over 5 spaces). If it had, and the sequence moved Figure R into the same quadrant as Figure T, then this would have received a higher score.</p>

Paper	Doc ID	Score	Notes
A108	AAAYIP1382 0000210850	0	<p>Anchor Paper 8 Score Point 0 This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided (rotation. 90°) would not be enough to move either figure into the same quadrant as the other for partial credit.</p>
A109	AAAYIP1382 0000294981	0	<p>Anchor Paper 9 Score Point 0 This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Noting the similarities between the figures (they both are the same kind of shape) is insufficient to receive credit because the prompt asks for geometric transformations to prove the two shapes are congruent.</p>

Practice Set #1
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p101	AAAYIP1382 0000362985	0	<p>Practice Set 1, Paper 1 Score Point 0 This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided (reflection on the x axes) would not be enough to move either figure into the same quadrant as the other for partial credit.</p>
p102	AAAYIP1382 0000196976	1	<p>Practice Set 1, Paper 2 Score Point 1 This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (reflect over the y axis, then... reflect over the x axis and then... translate... two squares to the right). The final translation should have only been one square to the right, instead of two. <p>Note: This response moves one figure into the same quadrant as the other figure.</p>
p103	AAAYIP1382 0000479577	2	<p>Practice Set 1, Paper 3 Score Point 2 This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (flipped figure T across the y axis, moved it one unit to the right, and then... 6 units down). <p>Note: The use of the term <i>flip</i> is acceptable to indicate a reflection; similarly, the use of the term <i>slide</i> is acceptable to indicate a translation.</p>

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p104	AAAYIP1382 0000366082	0	<p>Practice Set 1, Paper 4 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided (down six across the x axis) would not be enough to move either figure into the same quadrant as the other, regardless of which figure is moved.</p>
p105	AAAYIP1382 0000169626	2	<p>Practice Set 1, Paper 5 Score Point 2</p> <p>This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (6 translations down, flipped by y axis and moved one translation to the right). <p>Note: While this sequence only works if one were to start with figure T and neither figure is named as the starting point or end point, benefit of doubt should be given in the response's favor—if no starting figure is indicated and the given sequence would work with either figure or the other as the starting point, the response should be awarded full credit. See Anchor Paper 3.</p>
p106	AAAYIP1382 0000051395	1	<p>Practice Set 1, Paper 6 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (R would make a translation of 2 units left and 6 units up. Next... make a reflection across the "y" axis). To be a complete transformation, R would still have to be translated one unit to the left. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>

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p107	AAAYIP1382 0000214783	0	<p>Practice Set 1, Paper 7 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant.</p> <p>Note: This response does not identify what Figure T is being reflected over (T must have been reflected). If it had and the sequence moved Figure T into the same quadrant as Figure R then this would have received a higher score. See Anchor Paper 7.</p>
p108	AAAYIP1382 0000203010	0	<p>Practice Set 1, Paper 8 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. A comparison of the similarities of the two shapes without any transformation given is irrelevant to the prompt, which asks for a series of geometric transformations.</p>
p109	AAAYIP1382 0000411514	2	<p>Practice Set 1, Paper 9 Score Point 2</p> <p>This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations [1. Translate (T) 1 space to the left. 2. Flip (T) over the Y axis 3. Flip (T) over the X axis]. <p>Note: The use of the term <i>flip</i> is acceptable to indicate a reflection; similarly, the use of the term <i>slide</i> is acceptable to indicate a translation.</p>
p110	AAAYIP1382 0000411422	0	<p>Practice Set 1, Paper 10 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. A comparison of the similarities of the two shapes without any transformation given is irrelevant to the prompt, which asks for a series of geometric transformations.</p>

Practice Set #2
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Geometric transformations

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p201	AAAYIP1382 000058588	1	<p>Practice Set 2, Paper 1 Score Point 1 This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (<i>reflect across the line and transition down 6 units</i>) If this sequence was applied to Figure T and the reflection was over the y axis, then translated down, the figure would end up in the same quadrant as Figure R. Since one possibility of the given transformations does cause one figure to land in the same quadrant as the other, partial credit is received. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>
p202	AAAYIP1382 0000566069	2	<p>Practice Set 2, Paper 2 Score Point 2 This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> • The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations [Rotation 180°... Translated (x + 1,y)]. <p>Note: The rotation (180°) puts the figure into the correct quadrant and the translation to the right one unit is indicated by the expression [Translated (x + 1,y)].</p>

Paper	Doc ID	Score	Notes
p203	AAAYIP1382 0000203028	0	<p>Practice Set 2, Paper 3 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided would not be enough to move either figure into the same quadrant as the other (reflect figure R on the Y axis and then move the whole shape to the right 1). The given translation lacks the reflection across the x axis, so the two figures are not in the same quadrant.</p>
p204	AAAYIP1382 0000447888	1	<p>Practice Set 2, Paper 4 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (Reflection off the origin). The reflection off the origin places the moved figure into the same quadrant as the other figure, the same movement as a rotation of 180°. This response, however, lacks the translation to the right by 1 unit that is needed for full credit. <p>Note: This response provides a sequence that moves one figure into the same quadrant as the other receives partial credit.</p>
p205	AAAYIP1382 0000524178	0	<p>Practice Set 2, Paper 5 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Noting the position of the shapes without giving geometric transformations is insufficient for credit.</p>

Paper	Doc ID	Score	Notes
p206	AAAYIP1382 0000691832	2	<p>Practice Set 2, Paper 6 Score Point 2</p> <p>This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a correct and complete series of transformations (reflect figure R over the line $x = 3$. Then, you translate figure R 5 units to the left. Last, you translate figure R 6 units up). <p>Note: It is acceptable to use a reflection over lines other than the axes.</p>
p207	AAAYIP1382 0000047284	1	<p>Practice Set 2, Paper 7 Score Point 1</p> <p>This response receives partial credit. It includes one of the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a partial understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures. The response provides a partial sequence of correct transformations (rotation of 180 degrees). The translation to the right one unit is lacking. <p>Note: For a response to receive credit for a partially correct sequence, the response must provide a sequence that at least moves one figure into the same quadrant as the other figure.</p>
p208	AAAYIP1382 0000522310	0	<p>Practice Set 2, Paper 8 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided (rotation of 90°) would not be enough to move either figure into the same quadrant as the other.</p>

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p209	AAAYIP1382 0000727931	0	<p>Practice Set 2, Paper 9 Score Point 0</p> <p>This response receives no credit. It does not include the required elements:</p> <p>The response is incorrect or irrelevant. Note that the transformation provided (up 7 points to the left 6 points and flipped) would not be enough to move either figure into the same quadrant as the other because the flip would move the moved shape out of the same quadrant as the other. Unless otherwise specified in the response, a reflection, or flip, is taken to be across one of the axes.</p>
p210	AAAYIP1382 0000305688	2	<p>Practice Set 2, Paper 10 Score Point 2</p> <p>This response receives full credit. It includes the required elements:</p> <ul style="list-style-type: none"> The response demonstrates a complete understanding of describing a sequence of geometric transformations that exhibit the congruence between two figures (Reflect across the Y axis... across the X axis and move... one space to the right). The response provides a correct and complete series of transformations.

Qualification Set #1
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Paper	RF Number	Score	Notes
q101	AAAYIP1382 000058728	2	Qualification Set 1, Paper 1 Score Point 2
q102	AAAYIP1382 0000332892	1	Qualification Set 1, Paper 2 Score Point 1
q103	AAAYIP1382 0000414106	0	Qualification Set 1, Paper 3 Score Point 0
q104	AAAYIP1382 0000480950	0	Qualification Set 1, Paper 4 Score Point 0
q105	AAAYIP1382 0000492296	1	Qualification Set 1, Paper 5 Score Point 1
q106	AAAYIP1382 0000571129	2	Qualification Set 1, Paper 6 Score Point 2
q107	AAAYIP1382 0000588079	1	Qualification Set 1, Paper 7 Score Point 1
q108	AAAYIP1382 0000628999	0	Qualification Set 1, Paper 8 Score Point 0
q109	AAAYIP1382 0000192860	1	Qualification Set 1, Paper 9 Score Point 1
q110	AAAYIP1382 0000310129	0	Qualification Set 1, Paper 10 Score Point 0

Qualification Set #2
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Paper	RF Number	Score	Notes
q201	AAAYIP1382 0000640947	2	Qualification Set 2, Paper 1 Score Point 2
q202	AAAYIP1382 0000724551	1	Qualification Set 2, Paper 2 Score Point 1
q203	AAAYIP1382 0000160798	1	Qualification Set 2, Paper 3 Score Point 1
q204	AAAYIP1382 0000386479	0	Qualification Set 2, Paper 4 Score Point 0
q205	AAAYIP1382 0000196073	1	Qualification Set 2, Paper 5 Score Point 1
q206	AAAYIP1382 0000512788	2	Qualification Set 2, Paper 6 Score Point 2
q207	AAAYIP1382 0000625347	0	Qualification Set 2, Paper 7 Score Point 0
q208	AAAYIP1382 0000196818	1	Qualification Set 2, Paper 8 Score Point 1
q209	AAAYIP1382 0000452168	0	Qualification Set 2, Paper 9 Score Point 0
q210	AAAYIP1382 0000492094	0	Qualification Set 2, Paper 10 Score Point 0