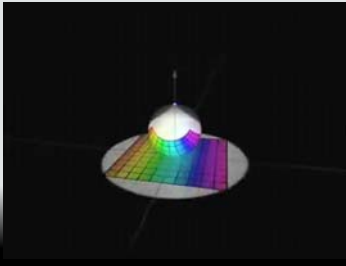



*MasterMath*  
NUMBER SENSE  
Transformations





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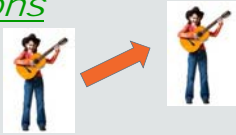
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Transformations

Translations 

Reflections 

Rotations 



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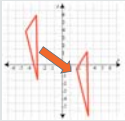
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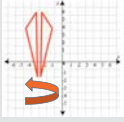
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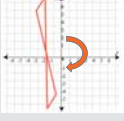
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Transformations

Translations 

Reflections 

Rotations 



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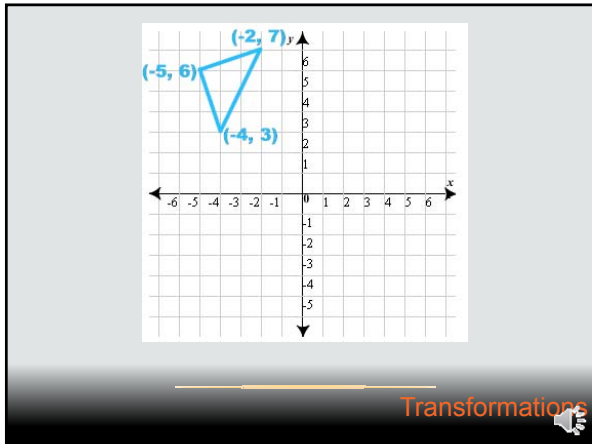
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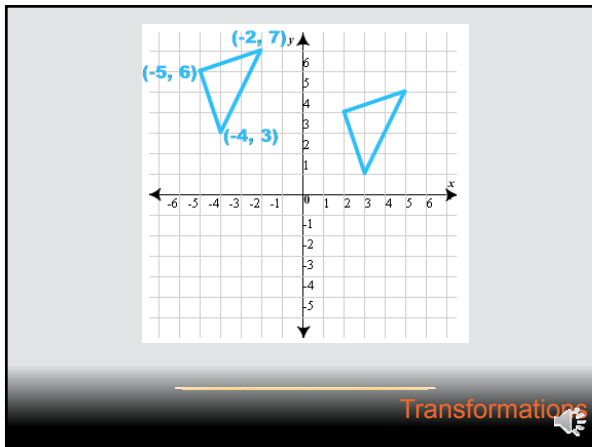
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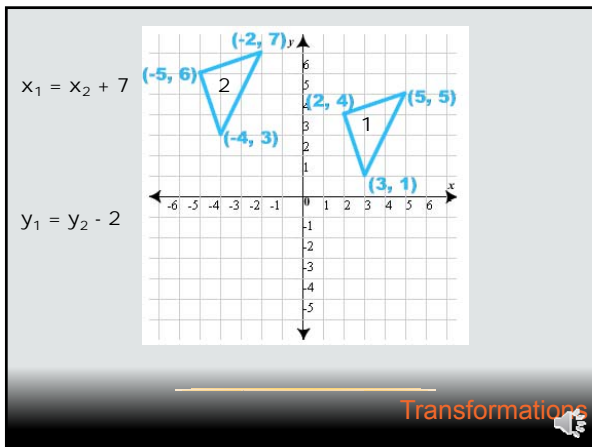
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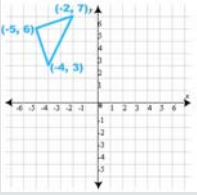
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**You try it!**



Translate this triangle 3 to the right and down 6. What are the new coordinates?

Transformations 

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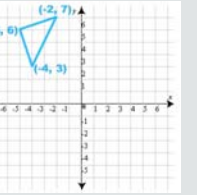
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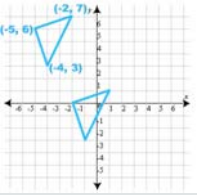
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**You try it!**



Translate this triangle 3 to the right and down 6. What are the new coordinates?

$(-2, 7) \rightarrow (-2 + 3, 7 - 6) = (1, 1)$   
 $(-5, 6) \rightarrow (-5 + 3, 6 - 6) = (-2, 0)$   
 $(-4, 3) \rightarrow (-4 + 3, 3 - 6) = (-1, -3)$



Transformations 

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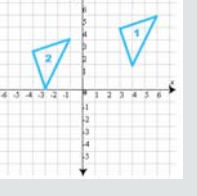
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**You try it!**



The coordinate plane shows the translation of Triangle 1 into Triangle 2. What change in the x and y coordinates represents this translation?

Transformations 

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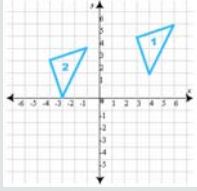
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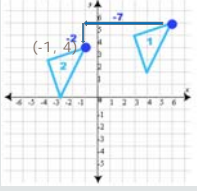
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**You try it!**



The coordinate plane shows the translation of Triangle 1 into Triangle 2. What change in the x and y coordinates represents this translation?



$x_1 = 6$   
 $x_1 - 7 = x_2 = 6 - 7 = -1$

$y_1 = 6$   
 $x_1 - 2 = x_2 = 6 - 2 = 4$

Transformations

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**You try it!**

Triangle 1 has the following coordinates: (-2, 6), (-5, 5) and (-4, 2). We translate this triangle down 8 (0 left and right). What are the coordinates of the new triangle?

Transformations

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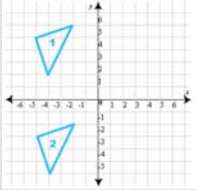
**You try it!**

Triangle 1 has the following coordinates: (-2, 6), (-5, 5) and (-4, 2). We translate this triangle down 8 (0 left and right). What are the coordinates of the new triangle?

$(-2, 6-8) = (-2, -2)$

$(-5, 5-8) = (-5, -3)$

$(-4, 2-8) = (-4, -6)$



Transformations

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