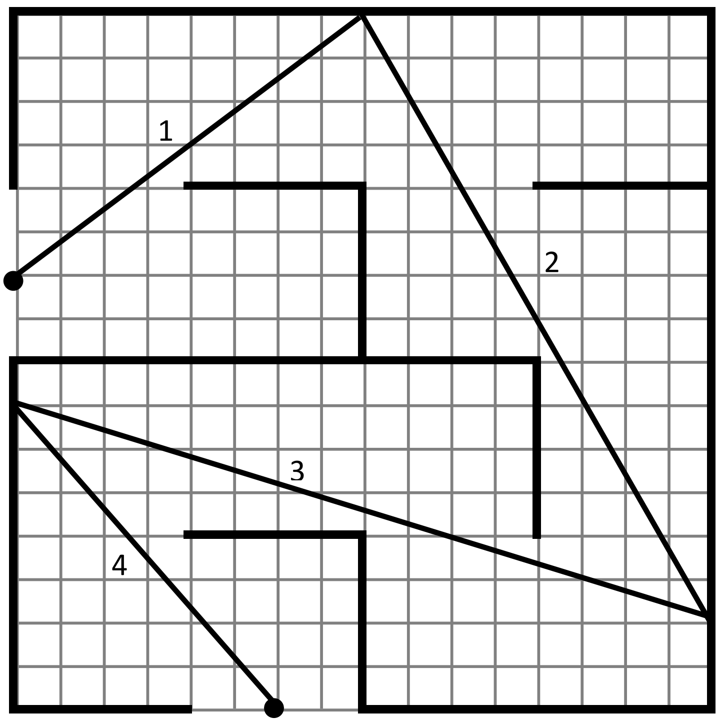
Geometry Unit 1: Transformations

Name: ___________________________________

1.1.3 A-Mazing Vectors Example

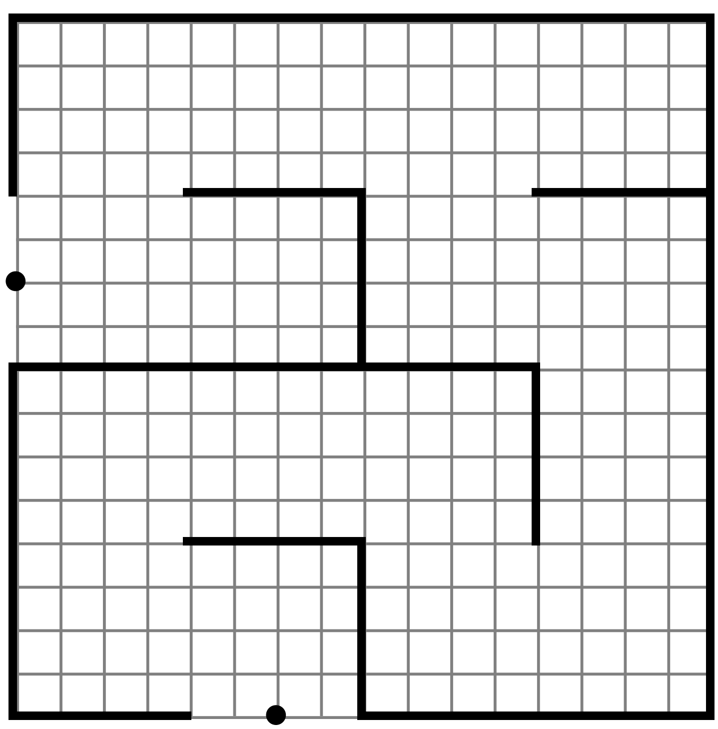
Date: ______________ Partner: ____________

Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The one with the smaller sum wins! Then record the horizontal change (Δx) and the vertical change (Δy) in number of boxes from the beginning to the end of each vector. Add up those changes separately.



Vector	Length (cm)	Δx	Δy
1	5.7	8	6
2	9.3	8	-14
3	9.7	-16	5
4	5.3	6	-7
Sum	30	6	-10

Now you try it:



Vector	Length (cm)	Δx	Δy
Sum			

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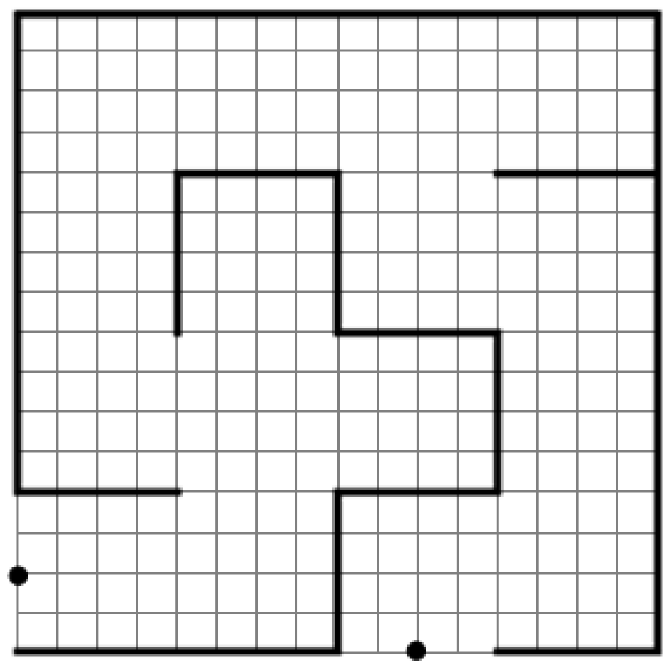
1.1.3 A-Mazing Vectors (1) Date: _______________ Partner: ____________

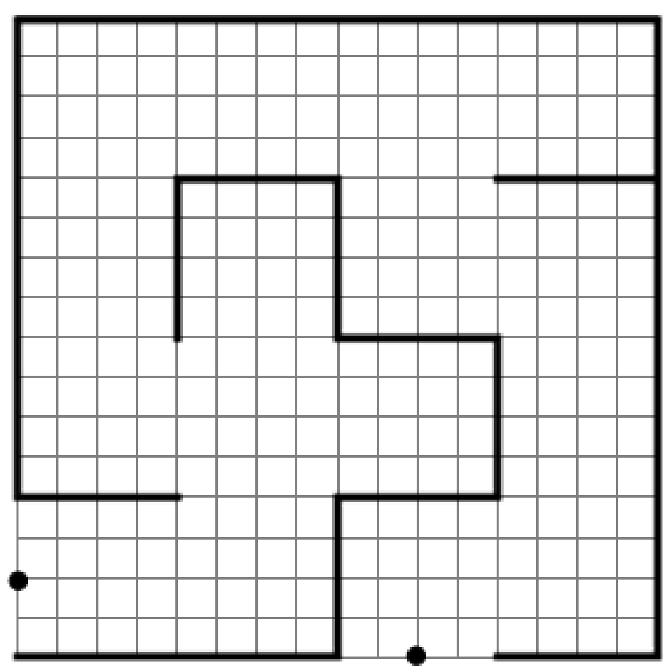
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



Vector	Length (cm)	Δx	Δy
Sum			

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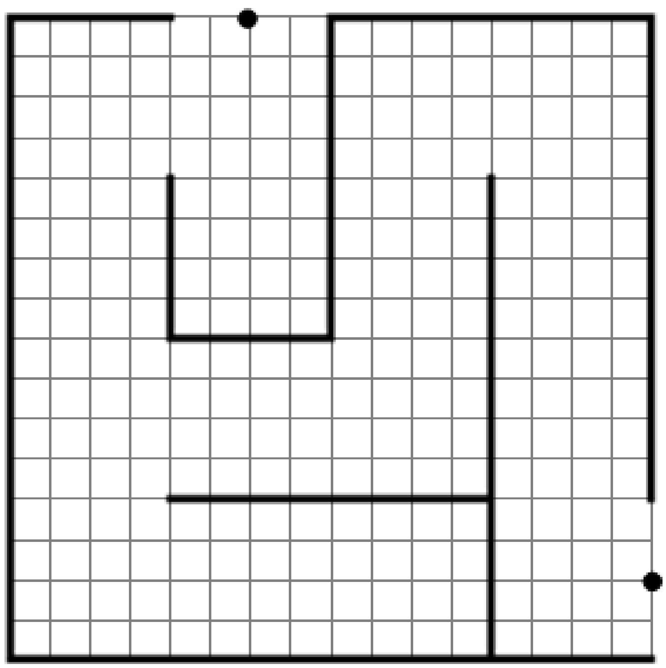
1.1.3 A-Mazing Vectors (2) Date: ______________ Partner: ____________

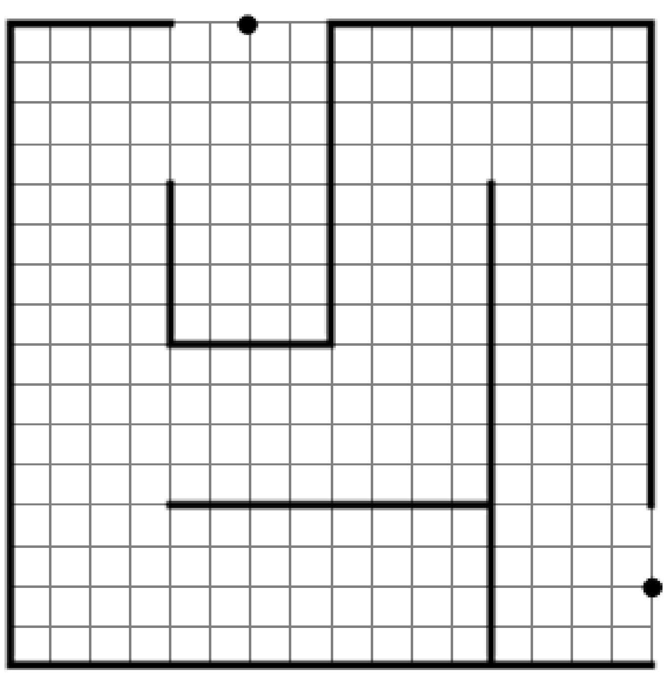
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



Vector	Length (cm)	Δx	Δy
Sum			

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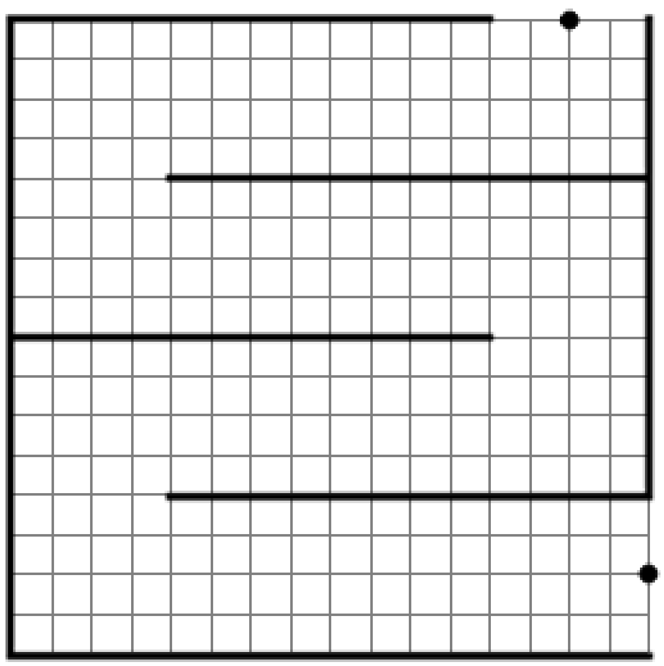
1.1.3 A-Mazing Vectors (3) Date: ________________ Partner: _____________

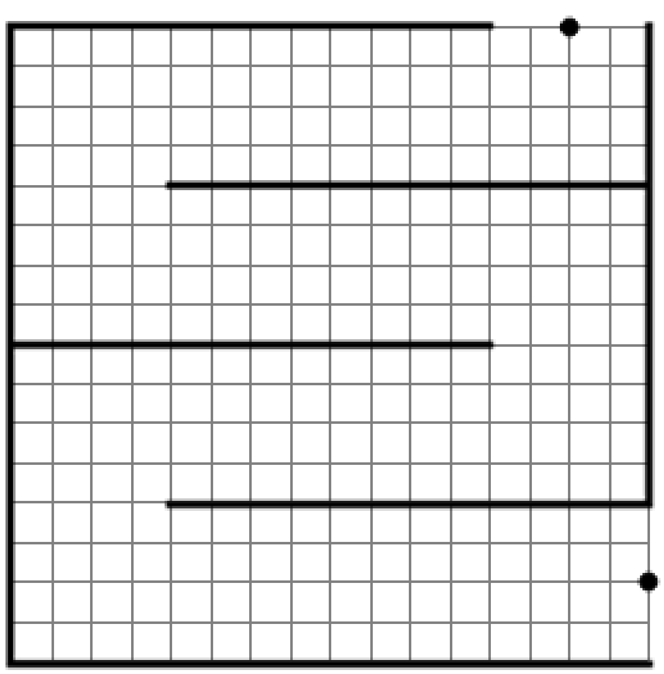
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



Vector	Length (cm)	Δx	Δy
Sum			

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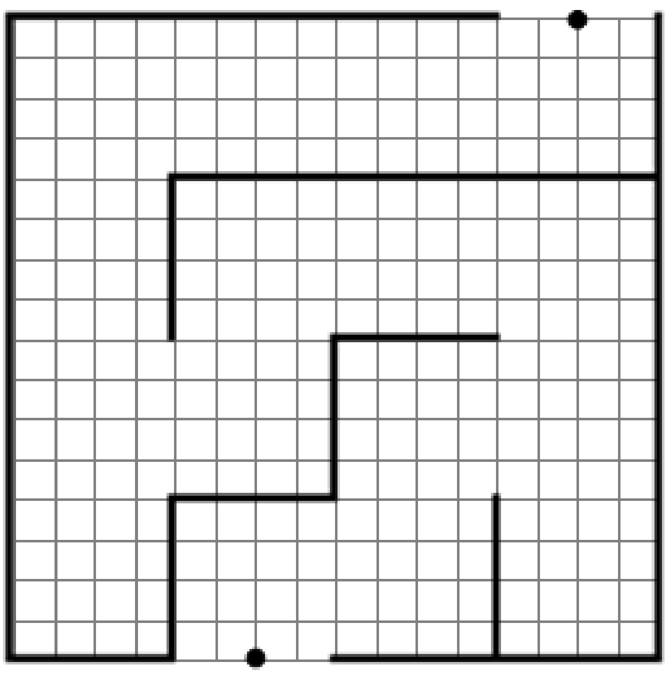
1.1.3 A-Mazing Vectors (4) Date: _______________ Partner: ____________

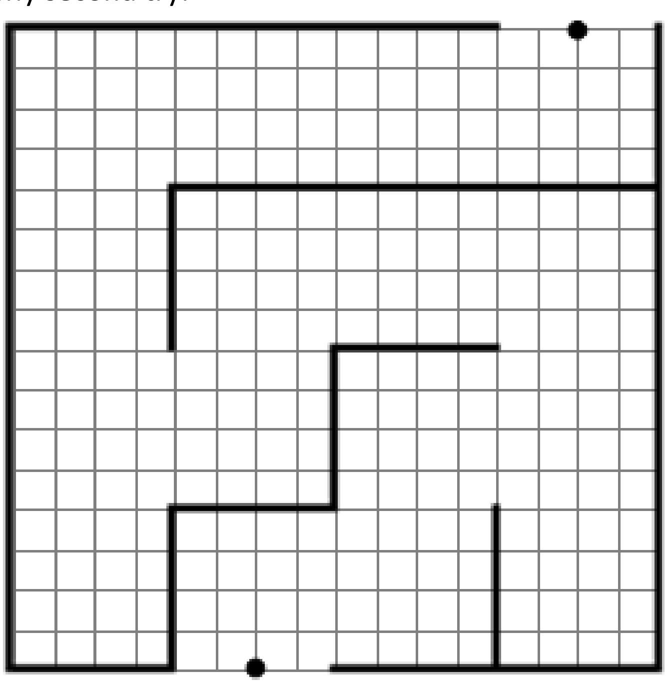
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



Vector	Length (cm)	Δx	Δy
Sum			

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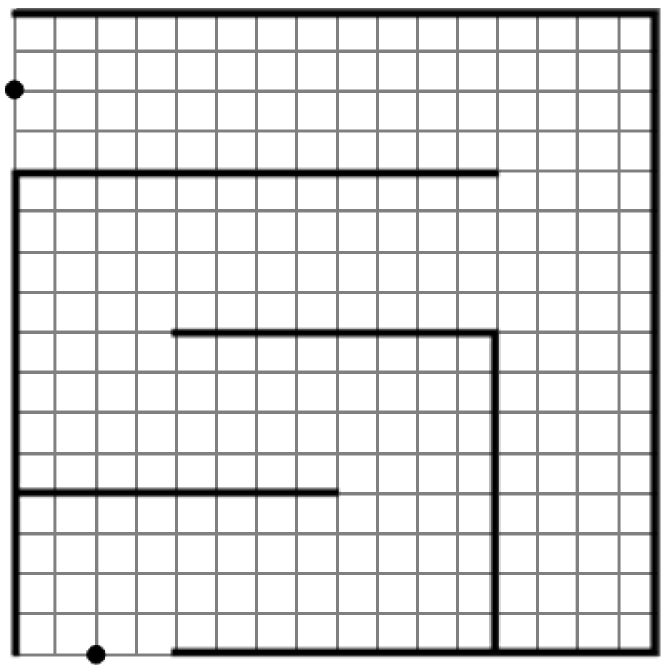
1.1.3 A-Mazing Vectors (5) Date: _______________ Partner: ____________

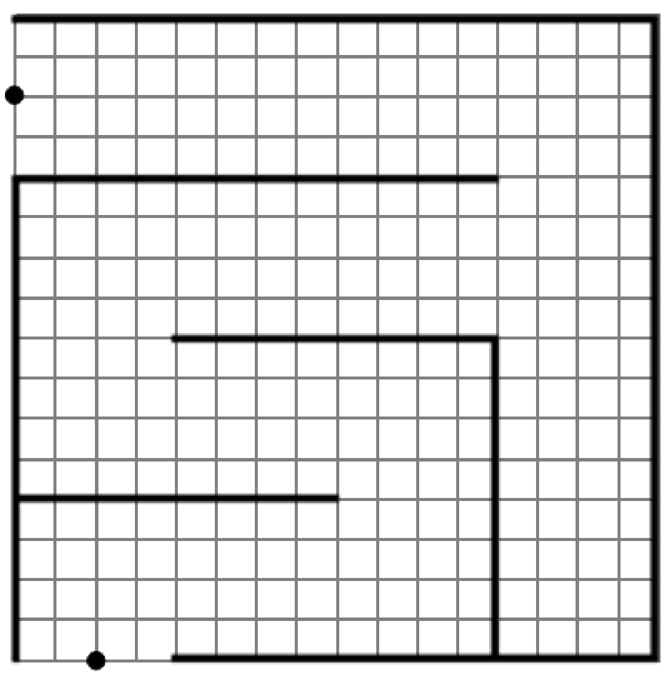
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



Vector	Length (cm)	Δx	Δy
Sum			

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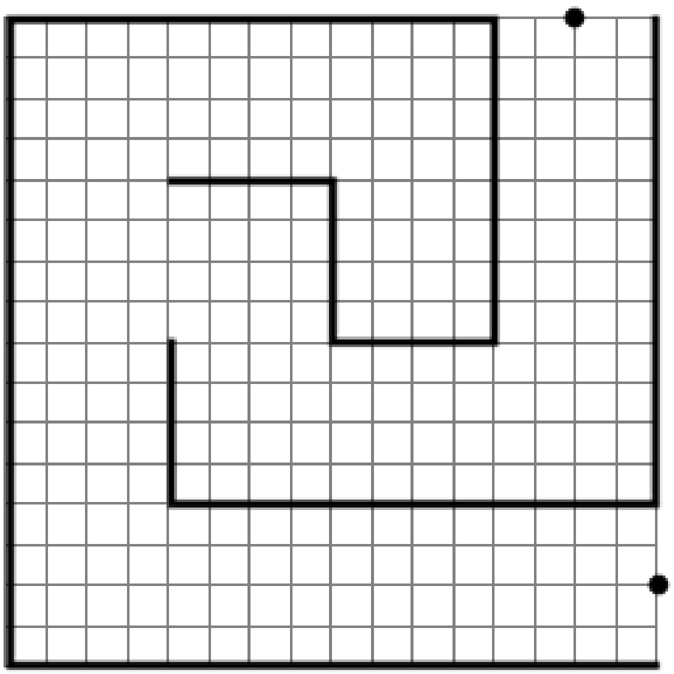
1.1.3 A-Mazing Vectors (6) Date: _______________ Partner: ____________

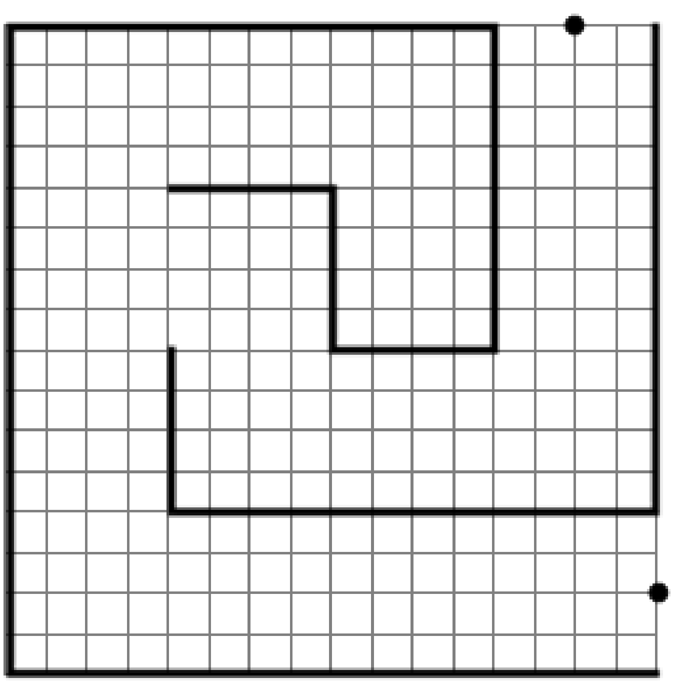
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The partner with the smaller sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately – what do you notice?

My first try:



Vector	Length (cm)	Δx	Δy
Sum			

My second try:



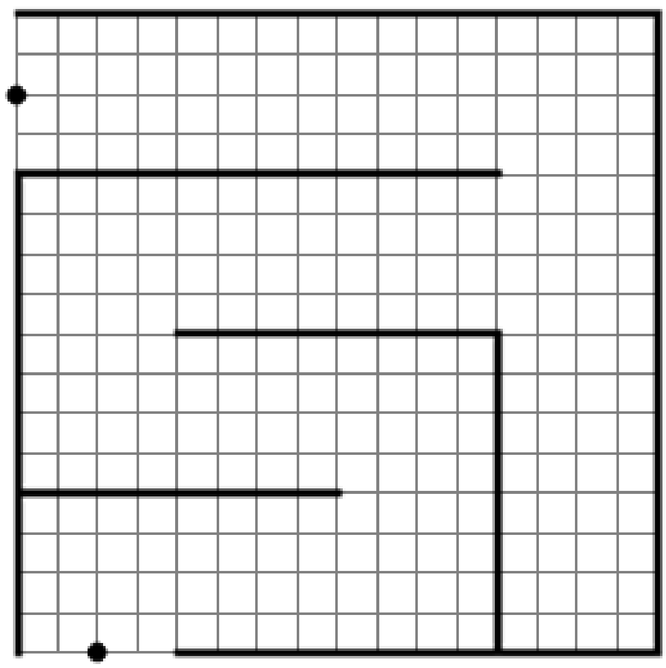
Vector	Length (cm)	Δx	Δy
Sum			

Geometry Unit 1: Transformations Name: ___________________________________

1.1.3 A-Mazing Vectors (HW) Date: _______________ Partner: ____________

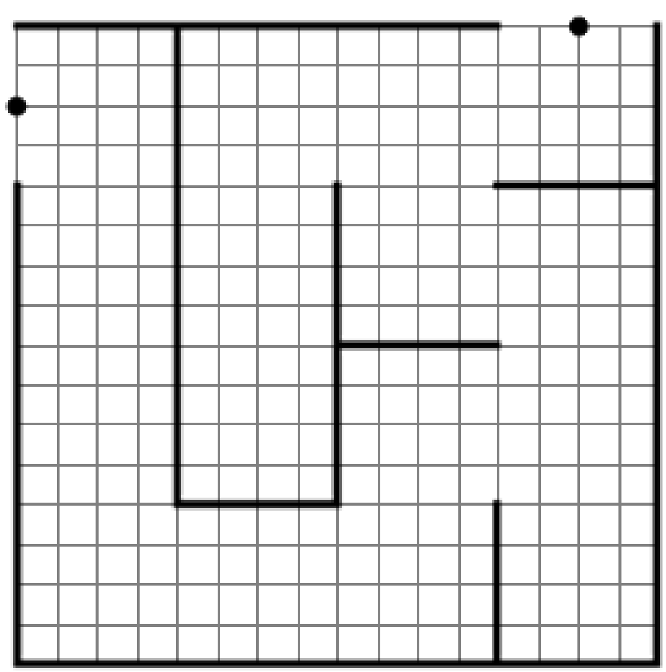
Use vectors to move from the dot at one end of the maze to the dot at the other end of the maze. You cannot touch the inner walls and you must only touch the outer walls where grid lines meet. Measure each vector and find the sum of the lengths. The student with the smallest sum wins! Record the horizontal change (Δx) and the vertical change (Δy) in *number of boxes* from the beginning to the end of each vector. Add up those changes separately. Then plot a direct path from dot to dot and identify the horizontal change (Δx) and the vertical change (Δy) – what do you notice?

1.



Vector	Length (cm)	Δx	Δy
Sum			

2.



Vector	Length (cm)	Δx	Δy
Sum			