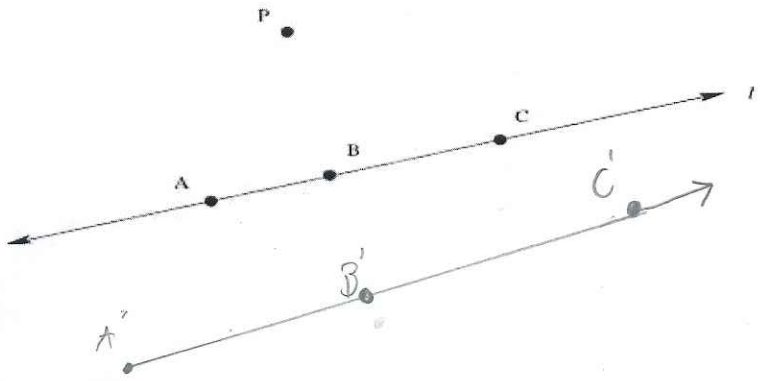
Spring 2013/ Geometry

Student A

## Dilating a Line

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

The distance A'B' is double the size of AB. The factor is 2 So you would expand it by a factor of 2 which would make it double the size of AB.

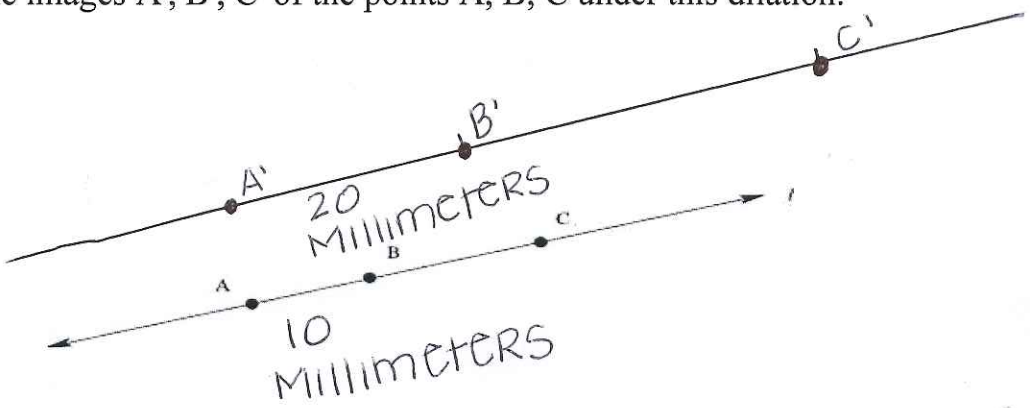
Spring 2013/ Geometry

Student B

G-SRT 1

**Dilating a Line**

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

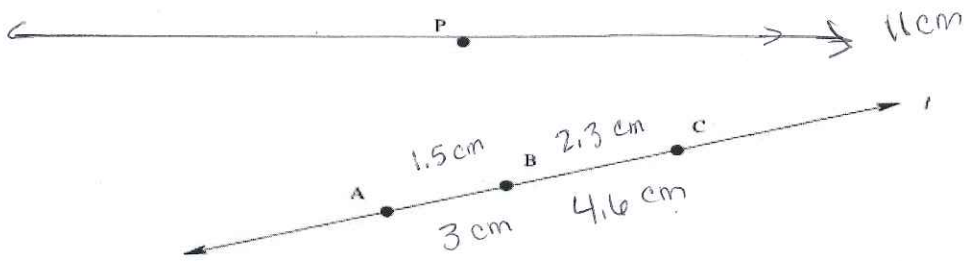
The relationship between A'B' & AB is AB is half the size of A'B'. The distance of AB equals 10 millimeters. And the distance of A'B' equals 20 millimeters The distance between the two are half of line (point p).

Student C



**Dilating a Line**

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

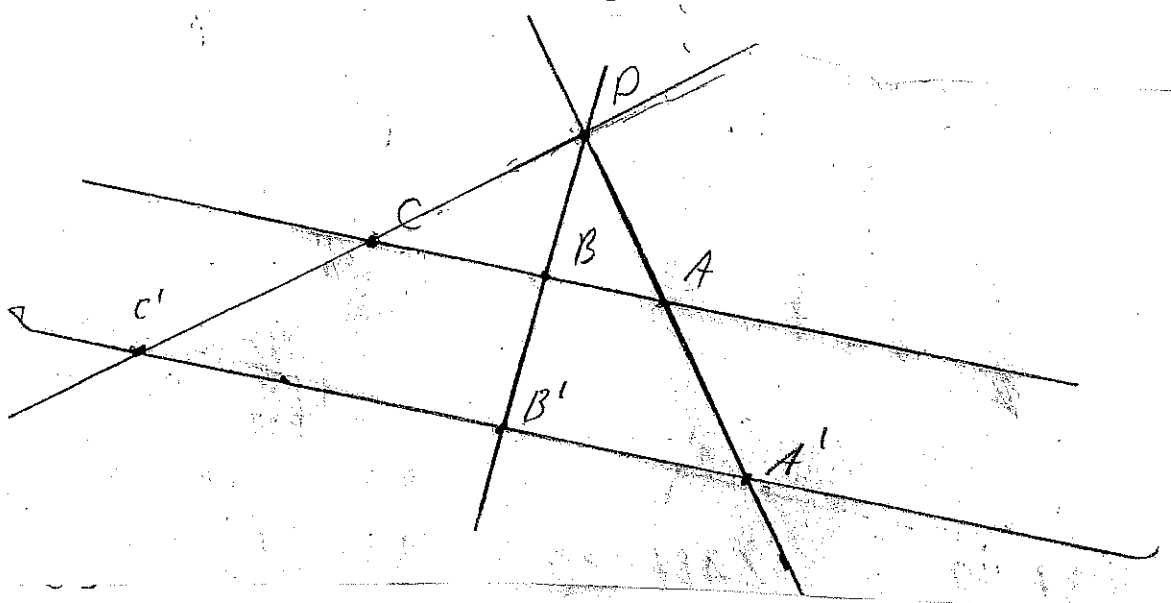
The relationship between A'B' and ~~AB~~ is A' is double the A and B' is double the B.

Student D



## Dilating a Line

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

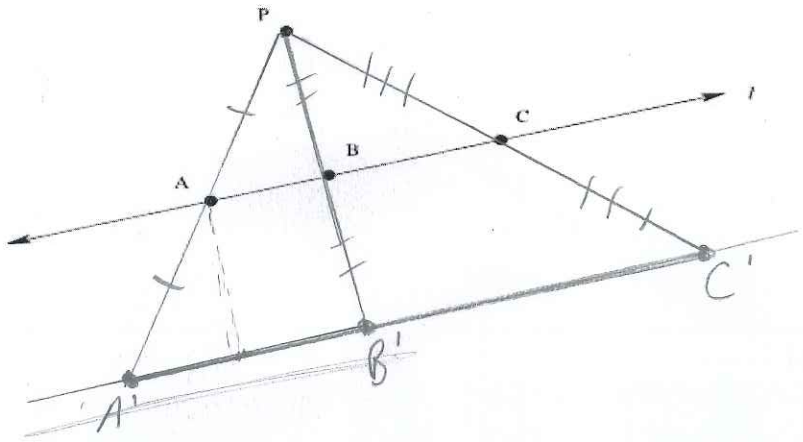
The distance of AB and A'B' is double. dilating the line by two would give you another line in which the distance from point P would also be doubled at the same angle. Thus A' and B' are double

Spring 2013/ Geometry

Student E

**Dilating a Line**

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

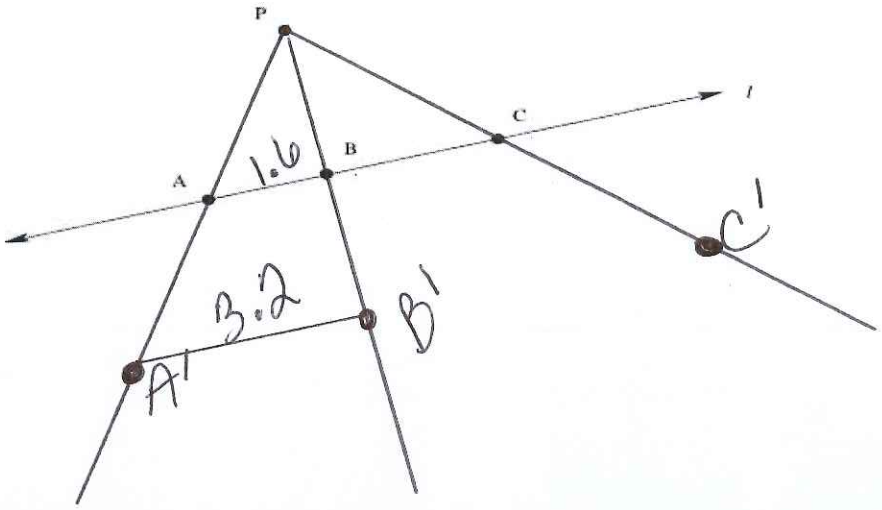
$2\overline{AP} = \overline{A'P}$, $2\overline{PB} = \overline{PB'}$; $2\overline{PC} = \overline{PC'}$. I used a ruler to measure the distance between $\overline{AP}$ and then doubled that to find $\overline{A'P}$. I did the same for the other segments. Once I found those segments ($\overline{A'P}$ $\overline{B'P}$, $\overline{C'P}$) I measured $\overline{AB}$ with a ruler and found $\overline{A'B'}$ is doubled $\overline{AB}$.

Spring 2013/ Geometry

Student F

## Dilating a Line

Suppose we apply a dilation by a factor of 2, centered at the point P, to the figure below. Locate the images A', B', C' of the points A, B, C under this dilation.




What is the relationship between the distance A'B' and the distance AB? Justify your answer in writing.

I folded the paper on the line and marked where point P fell on the other lines. So now A'B' is twice as long as AB. I measured it.