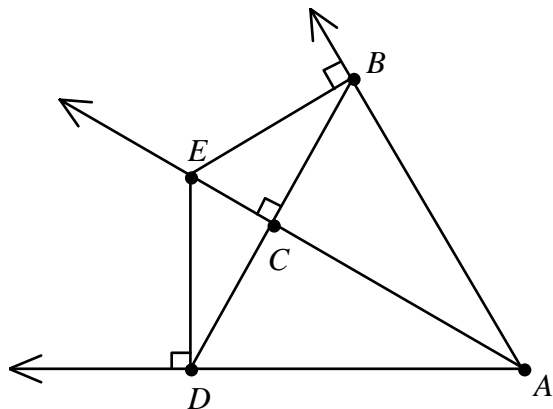


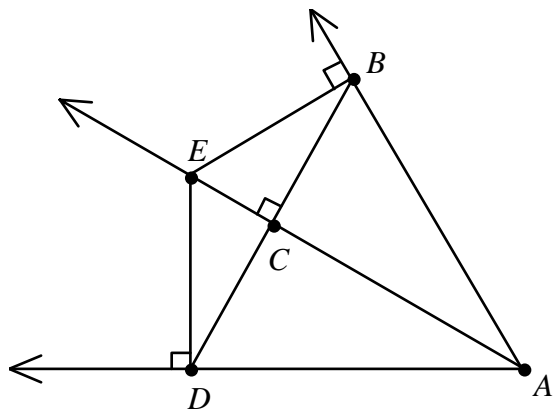
NAME: \_\_\_\_\_

1. Given:  $\overrightarrow{AE}$  bisects  $\angle DAB$ . Find  $ED$  if  $CB = 6$  and  $CE = 8$ . (not drawn to scale)



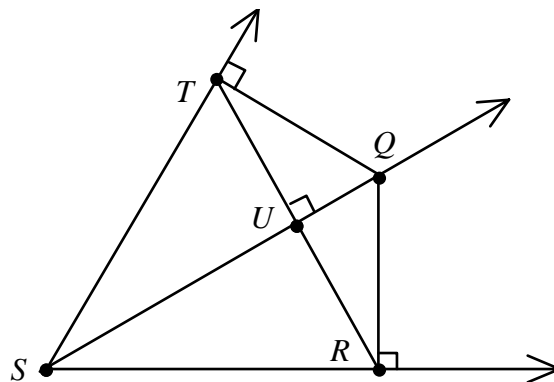
[A] 10    [B] 48    [C] 2    [D] 14

2. Given:  $\overrightarrow{AE}$  bisects  $\angle DAB$ . Find  $ED$  if  $CB = 15$  and  $CE = 20$ . (not drawn to scale)

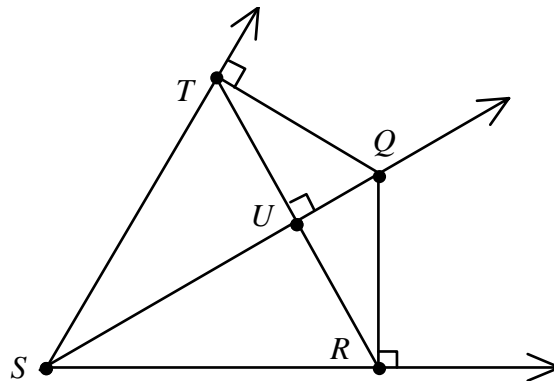


[A] 25    [B] 35    [C] 5    [D] 300

3. Given:  $\overrightarrow{SQ}$  bisects  $\angle RST$ . Find  $QR$  if  $UT = 9$  and  $UQ = 12$ . (not drawn to scale)

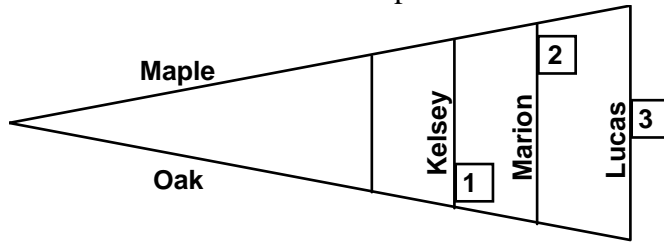


4. Given:  $\overrightarrow{SQ}$  bisects  $\angle RST$ . Find  $QR$  if  $UT = 40$  and  $UQ = 75$ . (not drawn to scale)

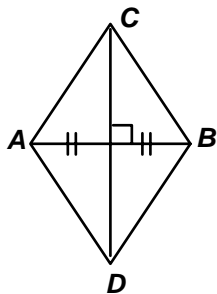


NAME: \_\_\_\_\_

5. Kareem wants to open a store, but he cannot afford the rent for a store on either Maple or Oak. Which of the locations shown would provide the best access to both streets? Explain.



6. Compare the quantity in Column A with the quantity in Column B.



<u>Column A</u>	<u>Column B</u>
$BC$	$BD$

- [A] The quantity in Column A is greater.                      [B] The quantity in Column B is greater.  
[C] The two quantities are equal.  
[D] The relationship cannot be determined on the basis of the information given.

7.  $\triangle JKL$  has vertices  $J(0, 0)$ ,  $K(4, 0)$ ,  $L(0, 5)$ . Find the equations of the lines that contain the three altitudes.

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| [A] $x = 0, y = 0, y = \frac{4}{5}x$ | [B] $x = 4, y = 5, y = \frac{4}{5}x$ |
| [C] $x = 5, y = 4, y = \frac{5}{4}x$ | [D] $x = 0, y = 0, y = \frac{5}{4}x$ |

[1] A

[2] A

[3] 15

[4] 85

Location 3, on Lucas street, because it appears to be closest to the angle bisector of the intersection of Oak and Maple and hence

[5] is nearly equidistant from both streets.

[6] D

[7] A