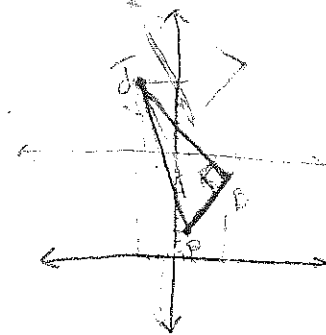


A

Grade 10  
Constructed Response for Fall 2010

The vertices of a triangle PBJ are  $P(1, 2)$ ,  $B(4, 6)$ , and  $J(-4, 12)$ . Which of the following statements about triangle PBJ must be true?

- a. Triangle PBJ is a right triangle with the right angle at P.
- b. Triangle PBJ is a right triangle with the right angle at B.
- c. Triangle PBJ is a right triangle with the right angle at J.
- d. Triangle PBJ is not a right triangle.



Answer:     d    

Justify your answer.

I say d because if it were a right triangle the one of the values of  $P \neq B$  would be negative opposites of each other.

P  
B J

**B**

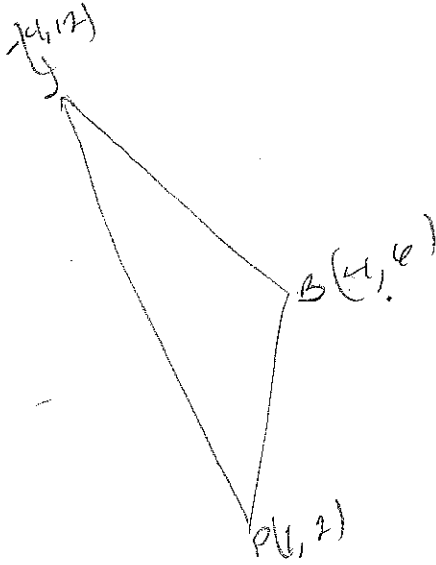
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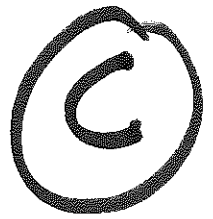
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Answer:   B  

Justify your answer.



(B) can be a right triangle because just by looking and knowing my slopes. B. is right triangle.



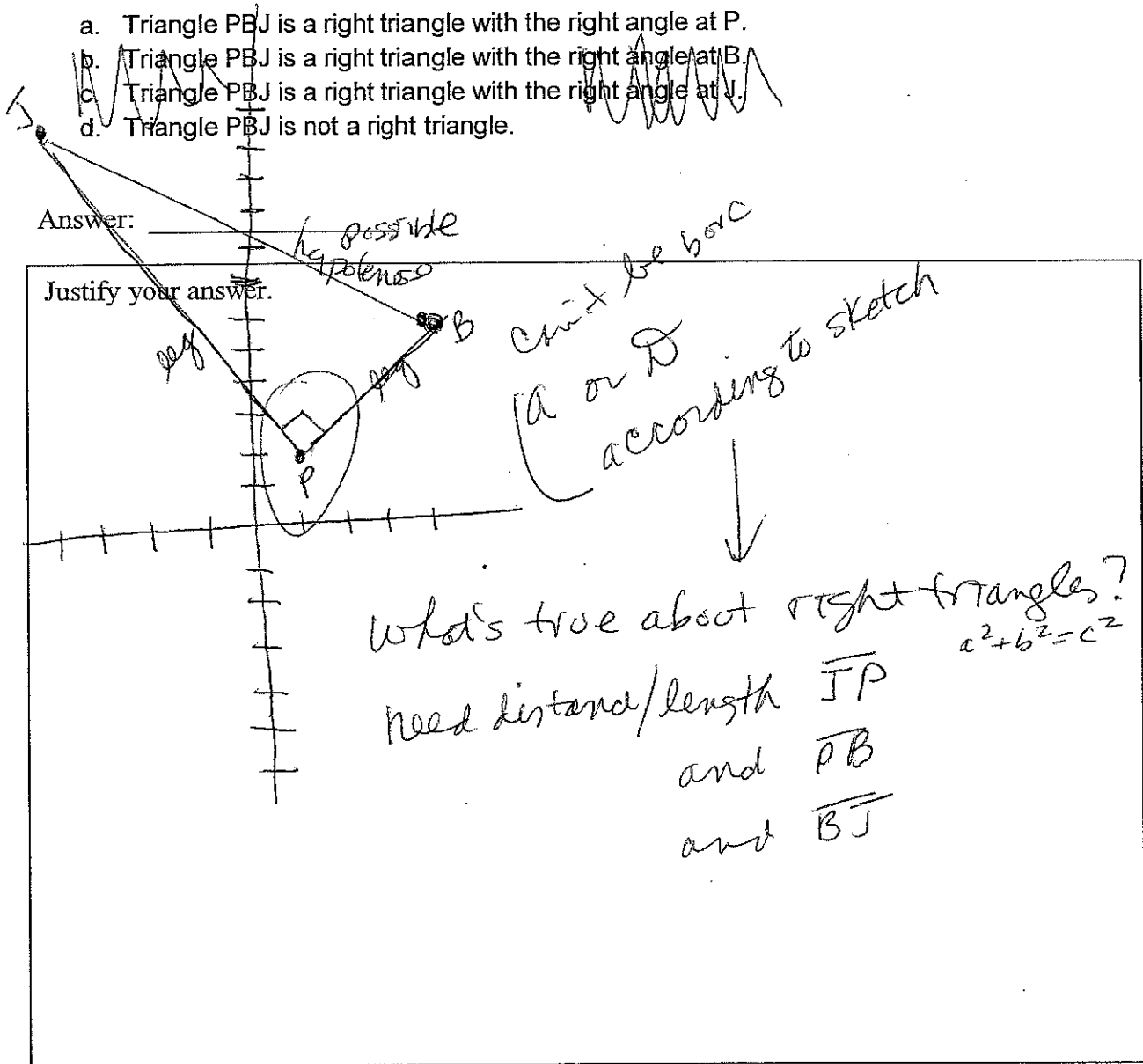
**Grade 10**  
**Constructed Response for Fall 2010**

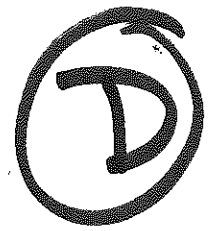
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Answer: \_\_\_\_\_

Justify your answer.





**Grade 10**  
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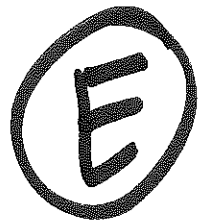
Answer:     B    

Justify your answer.

$$\begin{array}{l} B \quad P \\ \frac{6-2}{4-1} = \frac{4}{3} \end{array}$$

$$\begin{array}{l} J \quad B \\ \frac{12-6}{-4-4} = \frac{6}{-8} = -\frac{3}{4} \end{array}$$





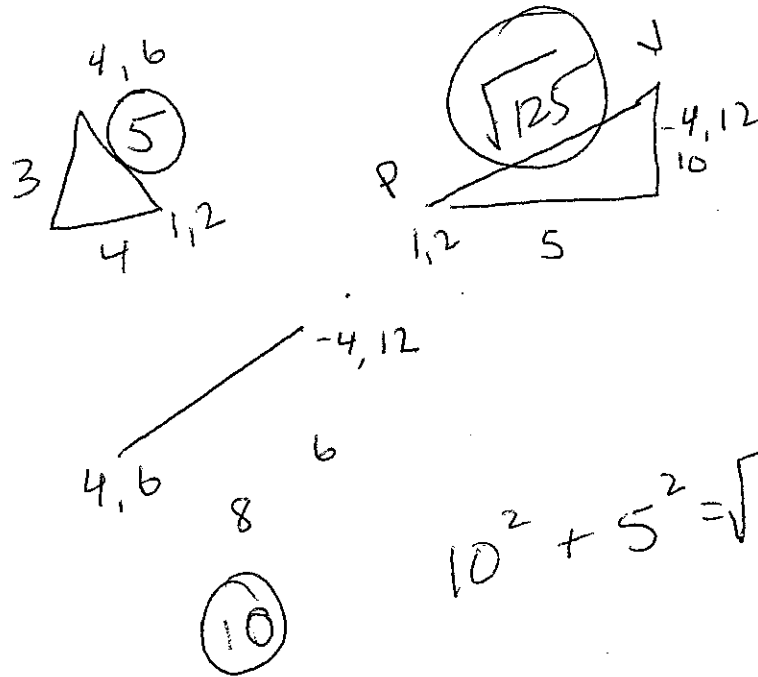
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Answer:     **B**    

Justify your answer.



F

Grade 10  
Constructed Response for Fall 2010

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- d. Triangle PBJ is not a right triangle.

Answer:     a    

Justify your answer.

