

Name \_\_\_\_\_

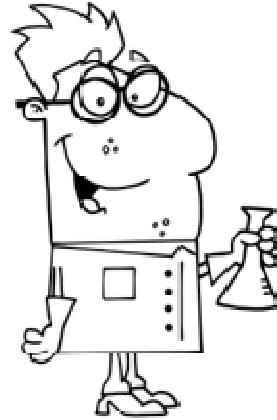
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### Applying Trigonometric Identities - Step-by-Step Lesson

If  $\sin \beta = 2/4$ , then what is the value of  $\tan \beta$ ?

Rounded to the nearest hundredth.

- a) 0.20
- b) 0.50
- c) 0.60
- d) 0.80



#### Explanation:

We need to remember the trigonometric relationship between sin and tan.

$$\tan \theta = \frac{\sin \theta}{\cos \theta} \quad \sin(x) = \cos(x - \pi/2)$$

$$\tan \theta = \frac{\cos(x - \pi/2)}{\cos \theta} \quad \text{replace values and plug in values to solve.}$$

$$\tan \beta = 0.60$$

