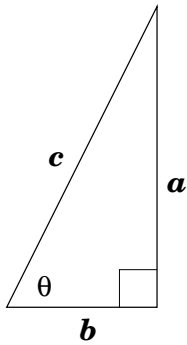


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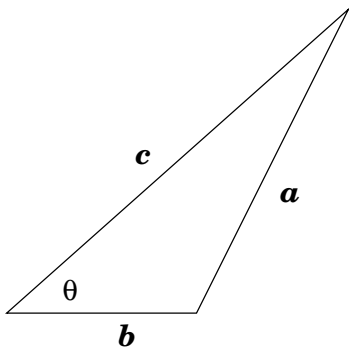
1. For the right triangle



the function $\sin \theta$ is given by the ratio

- (A) a/b
- (B) a/c
- (C) b/a
- (D) b/c
- (E) c/a
- (F) c/b

2. Use the pythagorean theorem to derive the law of cosines for the figure



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3. Convert the repeating decimal $1.\overline{45}$ to a fraction.

4. Derive the slope of the line tangent to $f(x) = x^2$ at the point $(x, f(x))$ using the method of approximation by secants.