Review for AAT TEST - Right Triangle Trig and Graphs of Trig functions
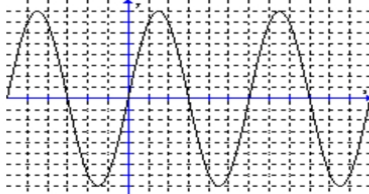
1. Match the graph with the correct function.
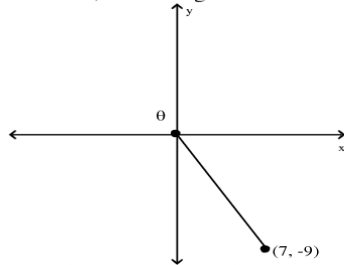

   a. $f(x) = 4\sin 2x$ b. $f(x) = 2\sin 4x$
   c. $f(x) = 4\cos 4x$ d. $f(x) = 2\cos 2x$

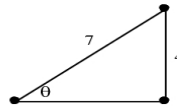2. The length of the shadow of a 200 foot tower is 70 feet. Find the angle of elevation of the sun.

   a. $65.4°$ b. $70.7°$ c. $73.2°$ d. $75.1°$ e. None of these

3. Find $\sin \theta$, for the angle θ shown.

   a. $-\dfrac{9\sqrt{130}}{130}$ b. $\dfrac{\sqrt{130}}{7}$ c. $-\dfrac{7}{9}$ d. $-\dfrac{9}{7}$

   e. $\dfrac{7\sqrt{130}}{130}$

4. Using the right triangle, find the exact value for $\cos x$.

   a. $\dfrac{4}{7}$ b. $\dfrac{7}{4}$ c. $\dfrac{\sqrt{33}}{4}$ d. $\dfrac{4\sqrt{33}}{33}$ e. None of these

5. Given $\sin \theta = -\dfrac{1}{5}$ and $\tan \theta < 0$, find $\cos \theta$.

   a. $-\dfrac{\sqrt{26}}{5}$ b. $\dfrac{\sqrt{26}}{5}$ c. $-\dfrac{2\sqrt{6}}{5}$ d. $\dfrac{2\sqrt{6}}{5}$

   e. None of these

6. A right triangle has an acute angle θ such that $\cot \theta = 15$. Find the exact value of $\cos \theta$.

   a. $\sqrt{226}$ b. $\dfrac{\sqrt{226}}{226}$ c. $\dfrac{15\sqrt{226}}{226}$ d. $\dfrac{\sqrt{226}}{15}$

   e. None of these