Incorrect. The amplitude is 4 . You can find the *y*-coordinate of the low point from this.

The period of this function is $\frac{2\pi}{\pi}=2$. You can use this fact, along with the fact that $y=4\cos(\pi x)$ does not have a negative sign, to determine where the hills and valleys are. The low point is in the middle of the valley. Make sure that you are choosing the low point inside the interval $\left[-\frac{1}{2},\frac{5}{2}\right]$.