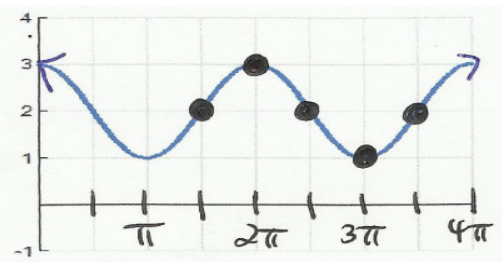
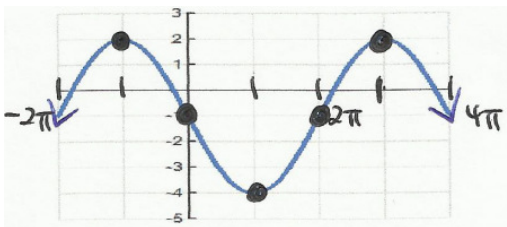


**Write the equation for either a sine or a cosine function based on the given info. Show work!**

| Given Info  | Function | Work to Find a , b , c , and d | Equation for Function |
|---|----------|--------------------------------|-----------------------|
| 1.) amplitude = 4 , period = $6\pi$ ,<br>right by $3\pi$ , down by 5                      | sine     |                                |                       |
| 2.) amplitude = 1 , period = $\frac{3\pi}{4}$ ,<br>left by $\frac{\pi}{2}$ , up by 2      | cosine   |                                |                       |
| 3.) amplitude = 3 , period = $\frac{\pi}{5}$ ,<br>left by $\pi$ , no vertical shift       | sine     |                                |                       |
| 4.)     |          |                                |                       |
| 5.) amplitude = 5 , period = $\frac{\pi}{2}$ ,<br>left by $\frac{\pi}{4}$ , up by 1       | cosine   |                                |                       |
| 6.) amplitude = $\frac{1}{2}$ , period = $2\pi$ ,<br>right by $\frac{\pi}{3}$ , down by 4 | cosine   |                                |                       |
| 7.) amplitude = 2 , period = $\frac{\pi}{4}$ ,<br>no phase shift , up by 3                | sine     |                                |                       |
| 8.)    |          |                                |                       |