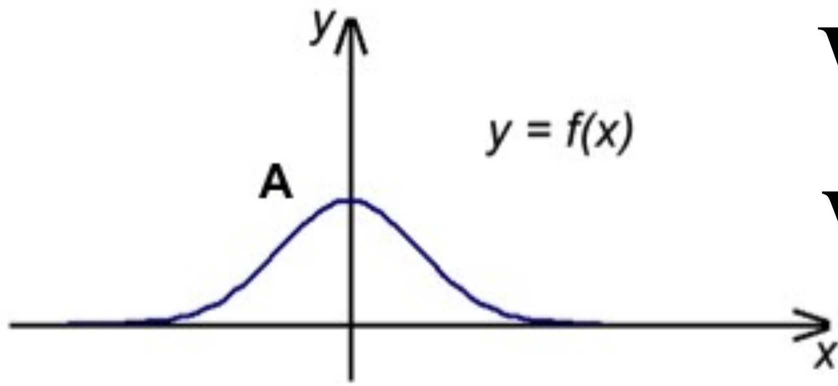
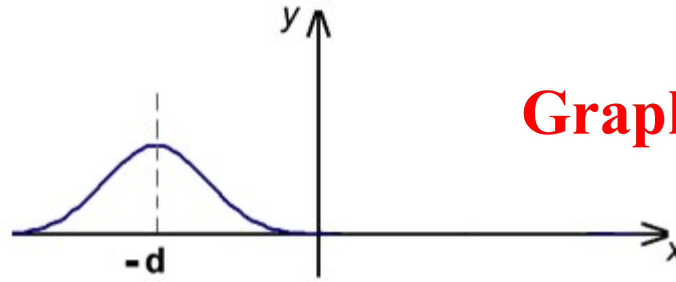
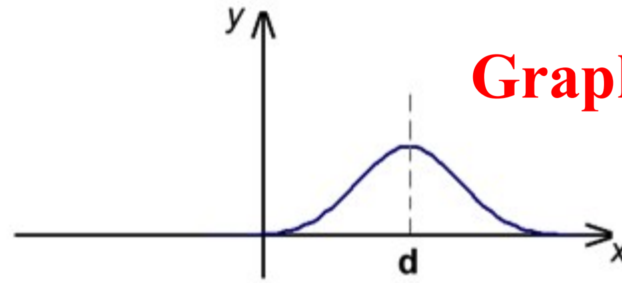


Which goes with which?

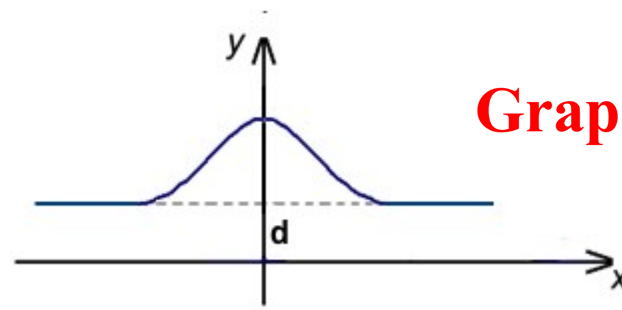
1. $y = f(x+d)$
2. $y = f(x-d)$
3. $y = f(x)+d$
4. $y = f(x)-d$
5. You can't tell if you don't know the form of f.
6. You can't tell for some other reason.



Graph I



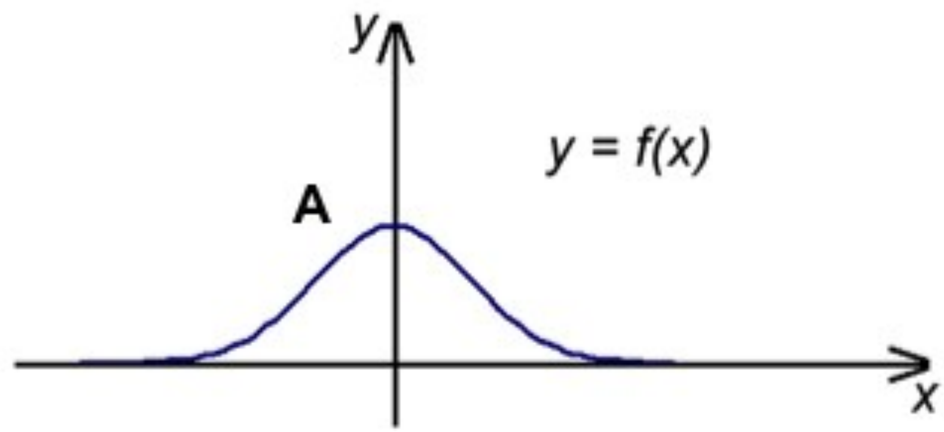
Graph II



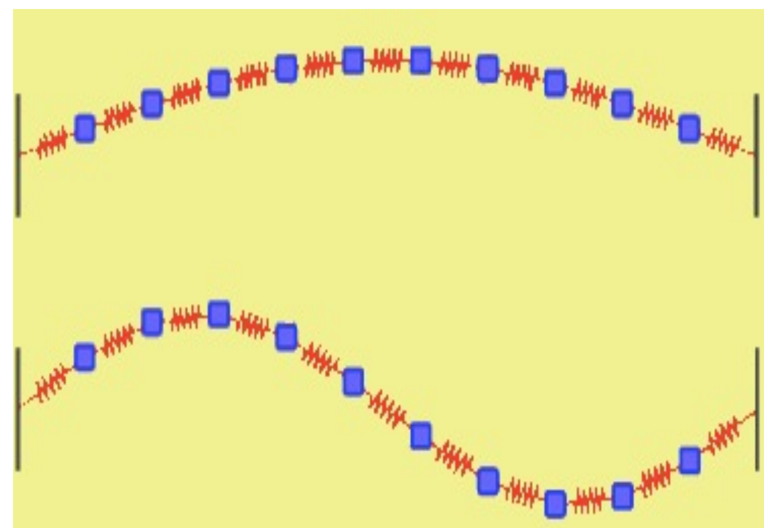
Graph III

Suppose a pulse with the shape $y = f(x)$ at $t = 0$. Which equation correctly represents the pulse at the time t if it is moving in the positive direction with a speed v_0?

1. $y = f(x + v_0 t)$
2. $y = f(x - v_0 t)$
3. $y = f(x) + v_0 t$
4. $y = f(x) - v_0 t$
5. Something else.



If we start our beaded string off in a sinusoidal shape $y(x) = \mathrm{A}\sin(\pi x/L)$ it will oscillate with a period T_0. If we start it out with a shape $y(x) = A\sin(2\pi x/L)$ with what period will it oscillate?



A. T_0
B. $2T_0$
C. $T_0/2$
D. Something else

If we start our beaded string off in a sinusoidal shape $y(x) = A\sin(\pi x/L)$ it will oscillate with a frequency f_0. If we start it out with a complex shape (shown) will it ever repeat itself? If yes, with what frequency?

A. f_0
B. $2f_0$
C. $f_0/2$
D. Something else