

Math 3
 Writing Sine and Cosine Equations From Graphs

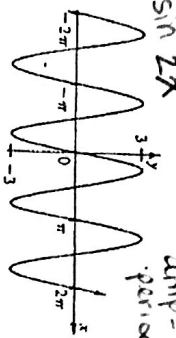
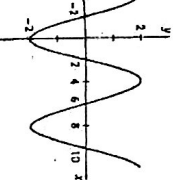
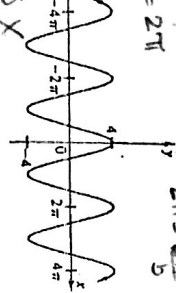
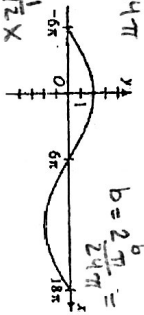
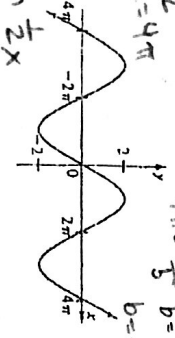
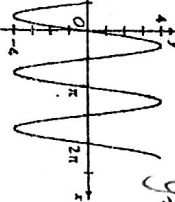
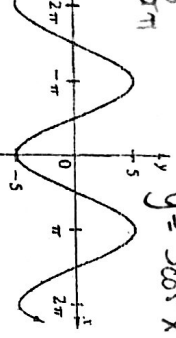
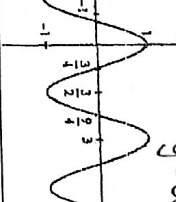
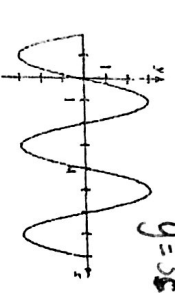
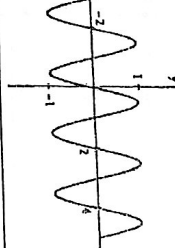
period = $\frac{2\pi}{b}$ $\pi = \frac{2\pi}{b}$ $\pi b = 2\pi$ $b = 2$

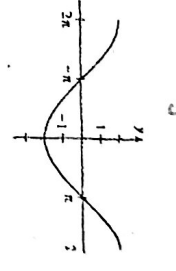
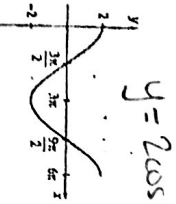
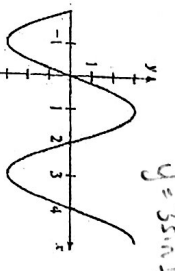
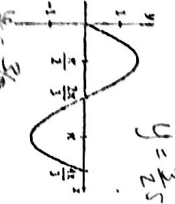
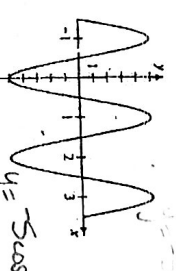
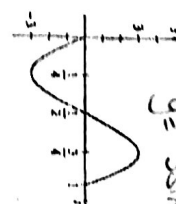
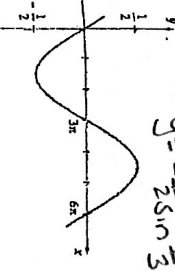
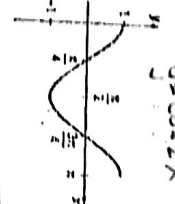
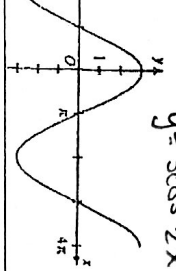
$8b = 4\pi$ $b = \frac{\pi}{4}$

$8 = \frac{2\pi}{b}$ $b = \frac{\pi}{4}$

Give the amplitude, period, and an equation for each graph.

period = $\frac{2\pi}{b}$

<p>21) $y = 3\sin 2x$ amp = 3 period = π</p> 	<p>21) amp = 2 period = 8 $y = 2\cos \frac{\pi}{4}x$</p> 
<p>3) amp = 4 period = 2π $y = 4\cos x$</p> 	<p>4) amp = 2 period = 24π $y = 2\cos \frac{1}{2}x$</p> 
<p>5) amp = 2 period = 4π $y = 2\sin \frac{1}{2}x$</p> 	<p>6) amp = 4 period = π $y = 4\sin 2x$</p> 
<p>7) amp = 5 period = 2π $y = -5\cos x$</p> 	<p>8) amp = 1 period = 3 $y = \cos \frac{2\pi}{3}x$</p> 
<p>9) amp = 3 period = 4 $y = 3\sin 2x$</p> 	<p>10) amp = 1 period = 2 $y = \sin \pi x$</p> 

<p>11) amp = 2 period = 4π $y = -2\cos \frac{1}{2}x$</p> 	<p>12) amp = 2 period = 6π $y = 2\cos \frac{1}{3}x$</p> 
<p>13) amp = 3 period = 4 $y = 3\sin \frac{\pi}{2}x$</p> 	<p>14) $y = \frac{3}{2}$ period = 4π $y = \frac{3}{2}\sin \frac{2}{3}x$</p> 
<p>15) amp = 5 period = 2 $y = -5\cos \pi x$</p> 	<p>16) amp = 3 period = 1 $y = -3\sin 2\pi x$</p> 
<p>17) amp = 1/2 period = 6π $y = -\frac{1}{2}\sin \frac{1}{3}x$</p> 	<p>18) amp = 1 period = π $y = \cos 2x$</p> 
<p>19) amp = 3 period = 4π $y = 3\cos \frac{1}{2}x$</p> 	<p>20) amp = 2 period = 3π $y = 2\sin \frac{2}{3}x$</p> 