

SOLUTIONS MANUAL

**CONTINUOUS
AND
DISCRETE SIGNALS
AND
SYSTEMS**

S E C O N D E D I T I O N

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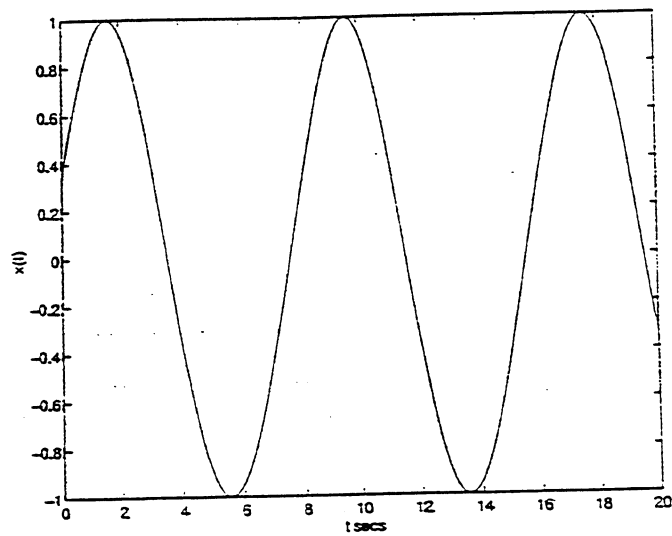
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Chapter 1

1.1

Signal	Period
$\cos(\pi t)$	2
$\sin(2\pi t)$	1
$\cos(3\pi t)$	$\frac{1}{3}$
$\sin(4\pi t)$	$\frac{1}{2}$
$\cos\left(\frac{\pi}{2} t\right)$	4
$\sin\left(\frac{\pi}{3} t\right)$	6
$\cos\left(\frac{5\pi}{2} t\right)$	$\frac{4}{5}$
$\sin\left(\frac{4\pi}{3} t\right)$	$\frac{3}{2}$
$\cos\left(\frac{\pi}{4} t\right)$	8
$\sin\left(\frac{2\pi}{3} t\right)$	$\frac{1}{3}$
$\cos\left(\frac{3\pi}{5} t\right)$	$\frac{10}{3}$

1.2



(a) $x(t) = \sin\left(\frac{\pi}{4} t + 20^\circ\right)$