Population Distribution	Sample Size	Sample Distribution	Sample standard deviation	Hypothesis	Sig Level	Sample mean	P value of sample mean	Significant?
$X \sim N(21, 1.5^2)$	20	$\bar{X} \sim N\left(21, \frac{1.5^2}{20}\right)$		$H_0: \mu = 21$ $H_1: \mu < 21$	5%	$\bar{x} = 19.8$	$P(\bar{X} < 19.8) =$	
$X \sim N(21, 1.5^2)$	20	$\bar{X} \sim N\left(21, \frac{1.5^2}{20}\right)$		$H_0: \mu = 21$ $H_1: \mu > 21$	5%	$\bar{x} = 20.4$	$P(\bar{X} > 20.4) =$	
$X \sim N(100, 5^2)$	36			$H_0: \mu = 100$ $H_1: \mu < 100$	5%	$\bar{x} = 98.5$	$P(\bar{X} < 98.5) =$	
$X \sim N(100, 5^2)$	36			$H_0: \mu = 100$ $H_1: \mu > 100$	5%	$\bar{x} = 101.5$		
	40	$\bar{X} \sim N\left(\quad , \frac{3.5^2}{40}\right)$		$H_0: \mu = 21$ $H_1: \mu < 21$	1%	$\bar{x} = 16.5$		
$X \sim N(100, 5^2)$	20				5%	$\bar{x} = 95$	$P(\bar{X} < 95) =$	
$X \sim N(100, 5^2)$	30				5%	$\bar{x} = 95$	$P(\bar{X} < 95) =$	