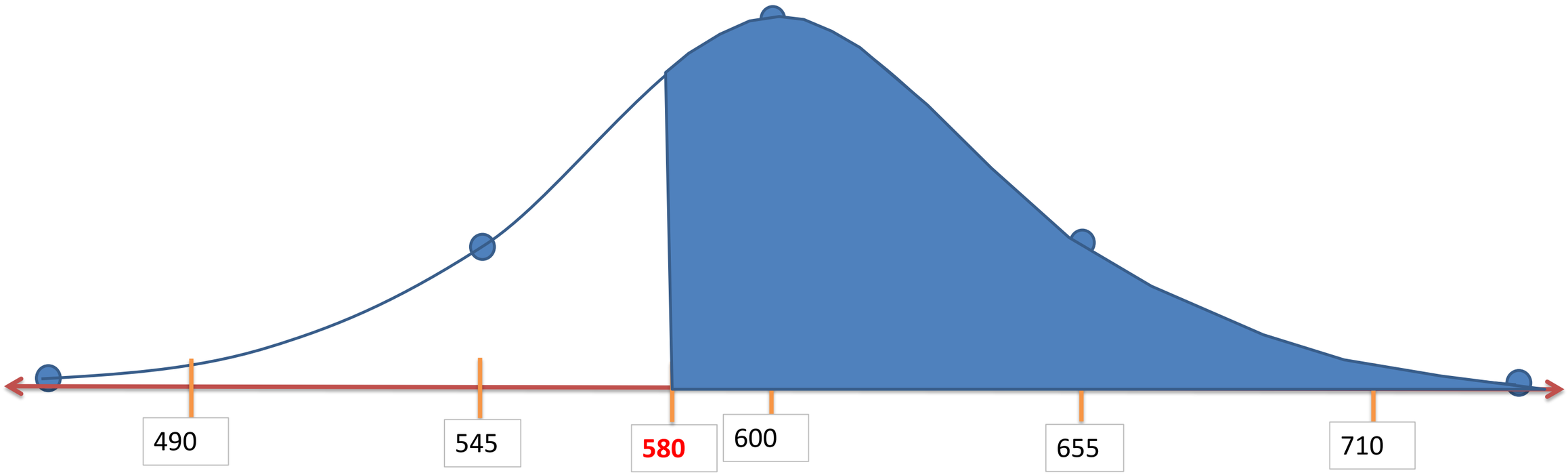
#1 **100% or 1**

#2 **". . . can never be more than 1 or less than 0."**

#3a $P(A) * P(B)$

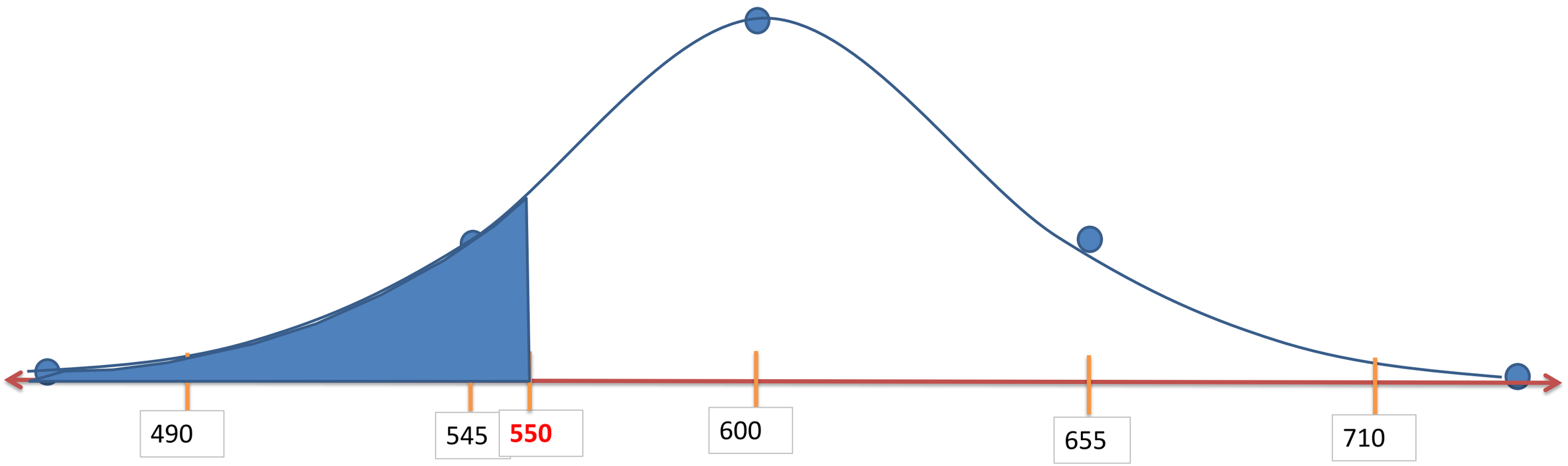
#3b **Independent**

#4 $P(A) + P(B) - P(A \cap B)$



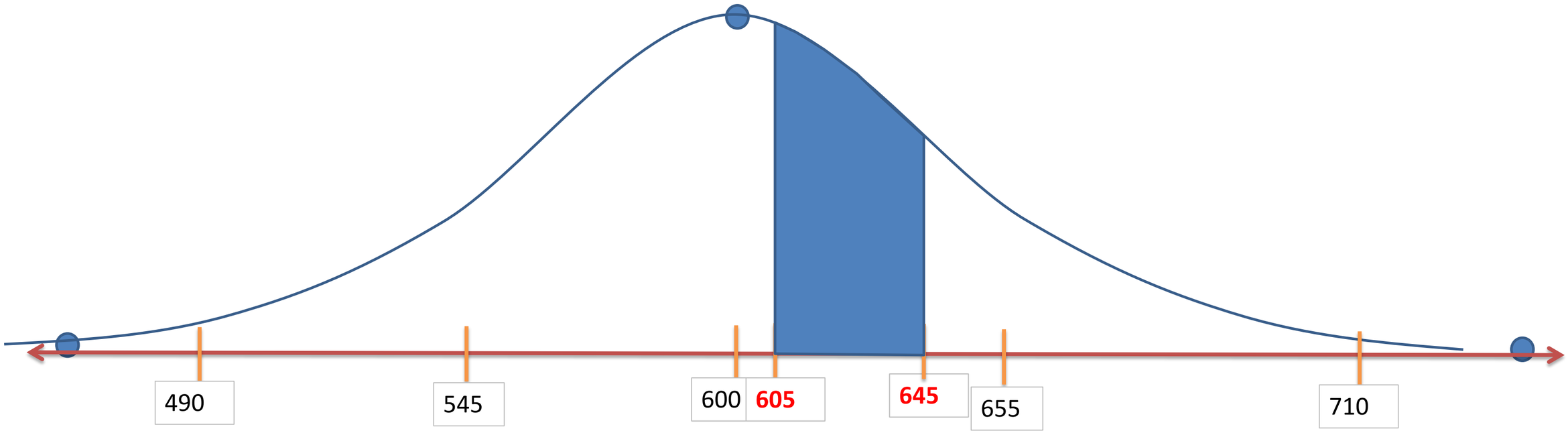
$$P(X > \mathbf{580}) = \quad \textbf{64.2\%}$$

#5 POPULATION DISTRIBUTION



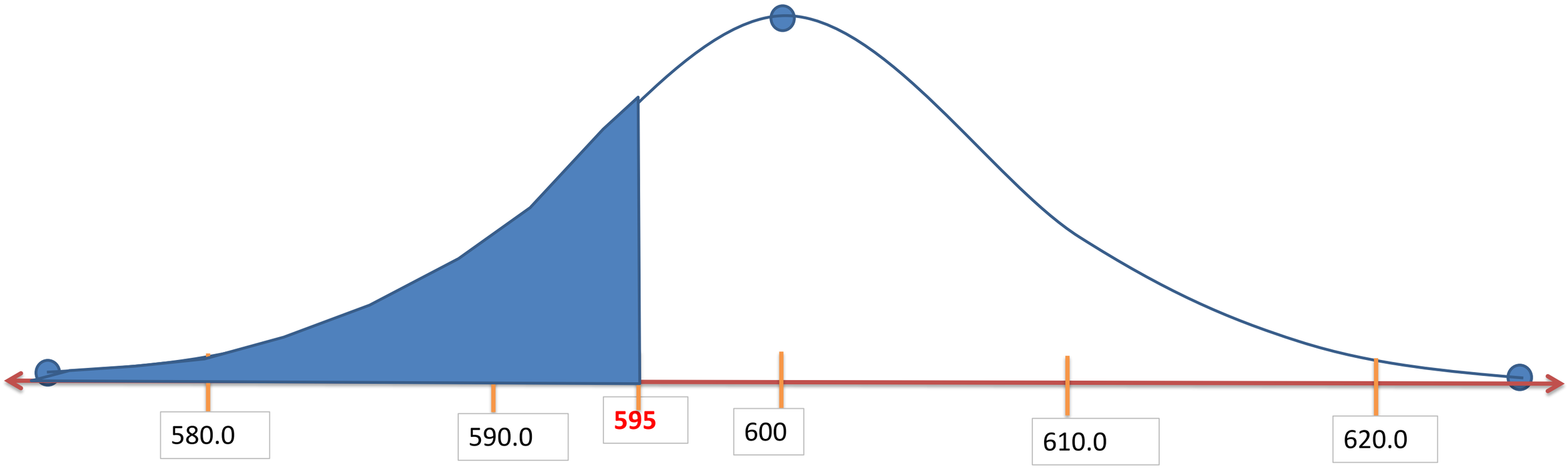
$$P(X < \mathbf{550}) = \quad \mathbf{18.2\%}$$

#7 POPULATION DISTRIBUTION



$P(\mathbf{605} < X < \mathbf{645}) =$ **79.3% - 53.6% = 25.7%**

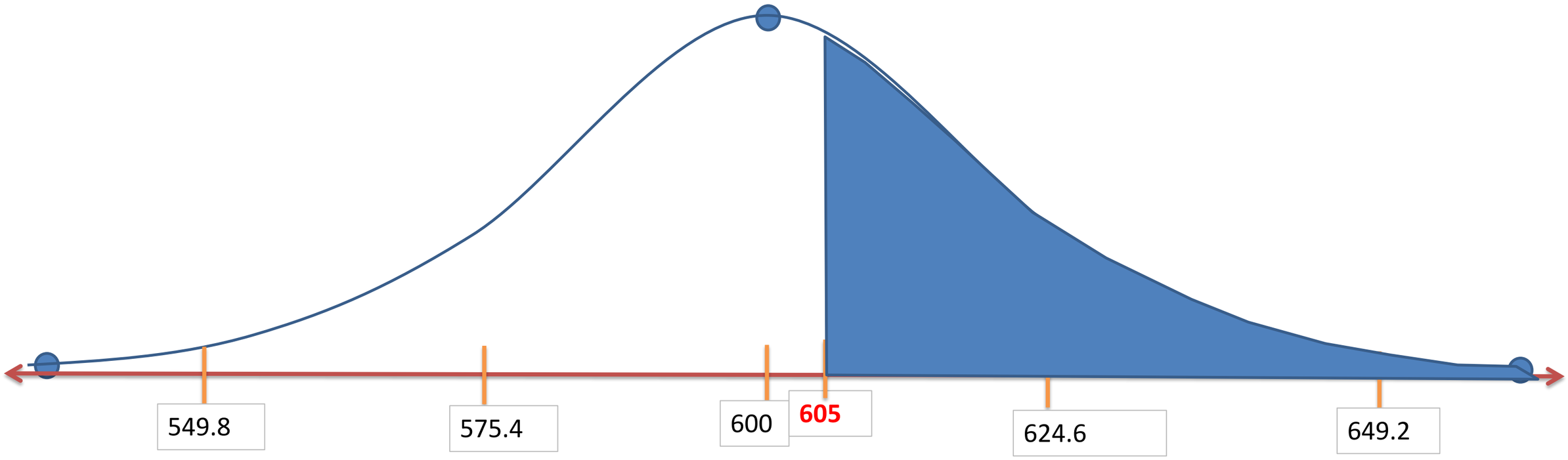
#8 POPULATION DISTRIBUTION



Standard Error = Standard Deviation of Sampling Distribution

10.0 $P(\bar{X} < \mathbf{595}) =$ **30.9%**

#6 SAMPLING DISTRIBUTION



Standard Error = Standard Deviation of Sampling Distribution

24.6

$$P(\bar{X} > \mathbf{605}) =$$

41.9%

#9 SAMPLING DISTRIBUTION

							OUTCOME VALUE		
$P(Boom \cap Competition)$ =	0.25	*	0.40	=	10.0%	*	$40.00	=	$4.00
$P(Boom \cap No\ Competition)$ =	0.25	*	0.60	=	15.0%	*	$50.00	=	$7.50
$P(Slow\ Growth \cap Competition)$ =	0.30	*	0.40	=	12.0%	*	$30.00	=	$3.60
$P(Slow\ Growth \cap No\ Competition)$ =	0.30	*	0.60	=	18.0%	*	$45.00	=	$8.10
$P(Recession \cap Competition)$ =	0.45	*	0.40	=	18.0%	*	$10.00	=	$1.80
$P(Recession \cap No\ Competition)$ =	0.45	*	0.60	=	27.0%	*	$20.00	=	$5.40
					100.0%		Expected value =		$30.40