$P(X \leq 65)$	$P(X \geq 65)$	$P(50 \leq X \leq 70)$	$P(X \leq 45)$
0.84134	0.15866	0.95450	0.00135
$P\left(Z \leq \dfrac{65-60}{5}\right) = P(Z \leq 1)$	$\begin{aligned} P(X \geq 65) &= 1 - P(X \leq 65) \\ &= 1 - P\left(Z \leq \dfrac{65-60}{5}\right) \\ &= 1 - P(Z \leq 1) \end{aligned}$	$\begin{aligned} P&\left(\dfrac{50-60}{5} \leq Z \leq \dfrac{70-60}{5}\right) \\ &= P(-2 \leq Z \leq 2) \\ &= P(Z \leq 2) - (1 - P(Z \leq 2)) \end{aligned}$	$\begin{aligned} P(X \leq 45) &= 1 - P(X \geq 75) \\ &= 1 - P\left(\dfrac{75-60}{5}\right) \\ &= 1 - P(Z \leq 3) \end{aligned}$

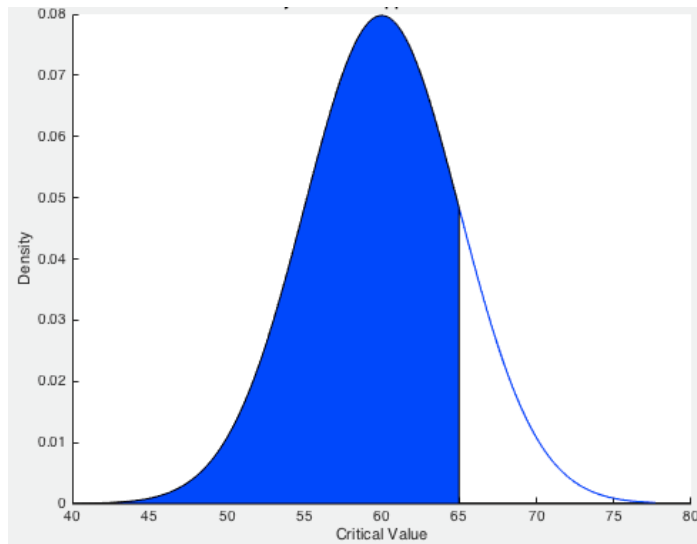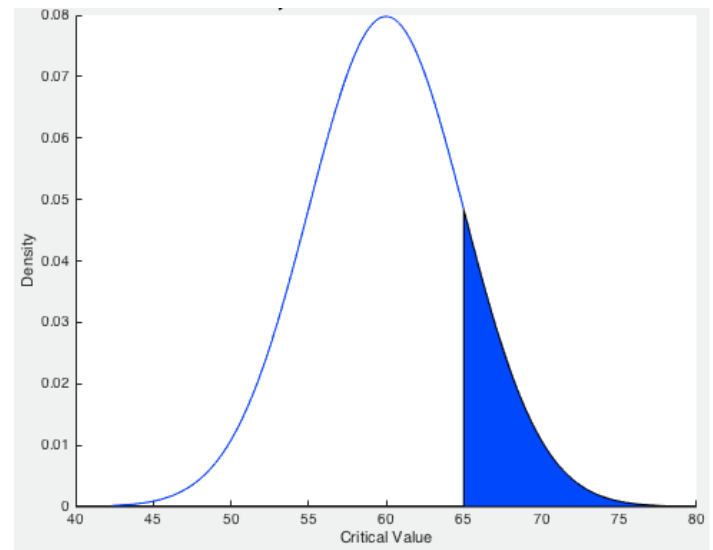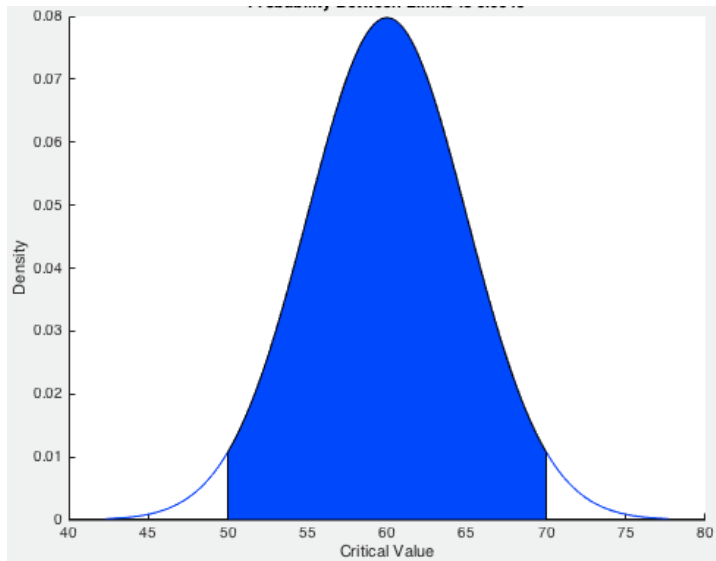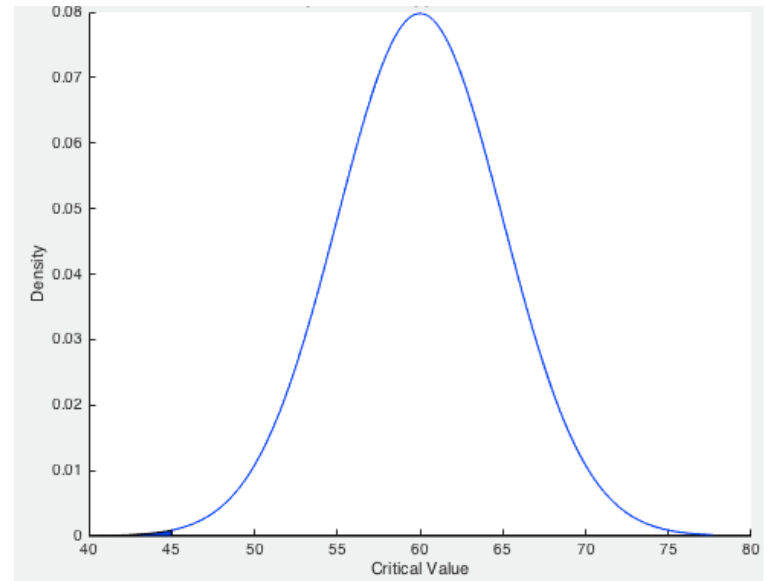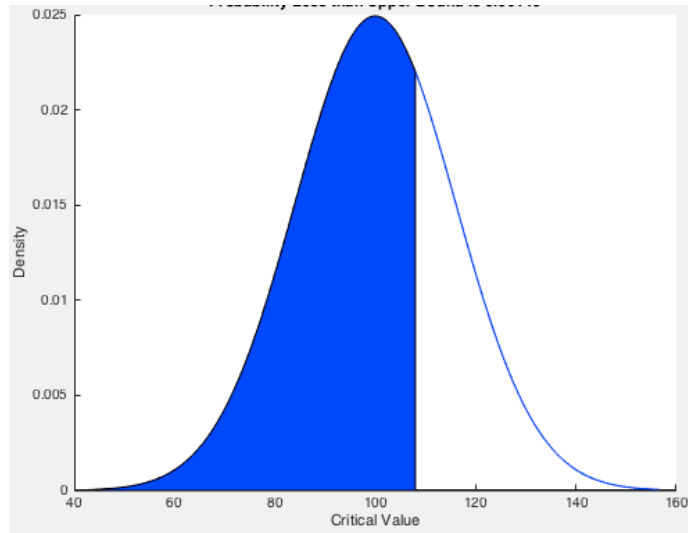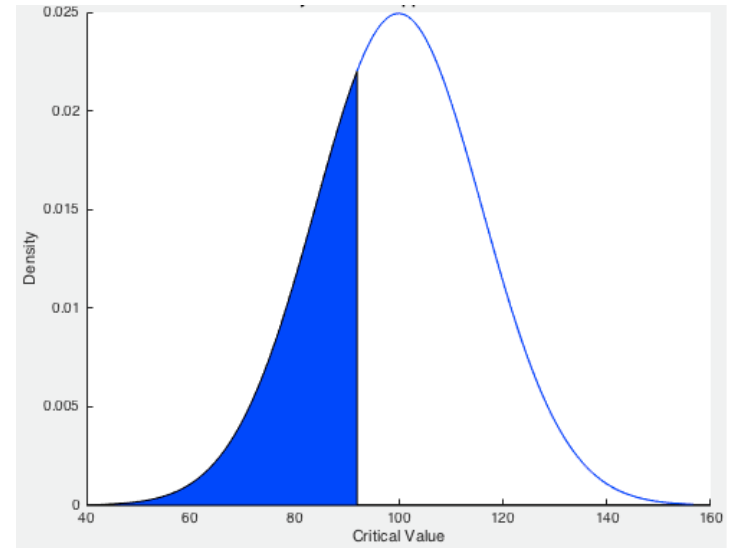| $P(X \leq 108)$	$P(X \leq 92)$	$P(84 \leq X \leq 112)$	
0.69146	0.30854	0.61504	0.97725
$P\left(Z \leq \dfrac{108 - 100}{16}\right) = P\left(Z \leq \dfrac{1}{2}\right)$	$\begin{aligned} P\left(Z \leq \dfrac{92 - 100}{16}\right) &= P\left(Z \leq -\dfrac{1}{2}\right) \\ &= P\left(Z \geq \dfrac{1}{2}\right) \\ &= 1 - P\left(Z \leq \dfrac{1}{2}\right) \end{aligned}$	$\begin{aligned} P&\left(\dfrac{84 - 100}{16} \leq Z \leq \dfrac{112 - 100}{16}\right) \\ &= P(-1 \leq Z \leq 0.75) \\ &= P(Z \leq 0.75) - P(-1 \leq Z) \\ &= P(Z \leq 0.75) - (1 - P(Z \leq 1)) \end{aligned}$	

$X \sim N(60,5^2)$

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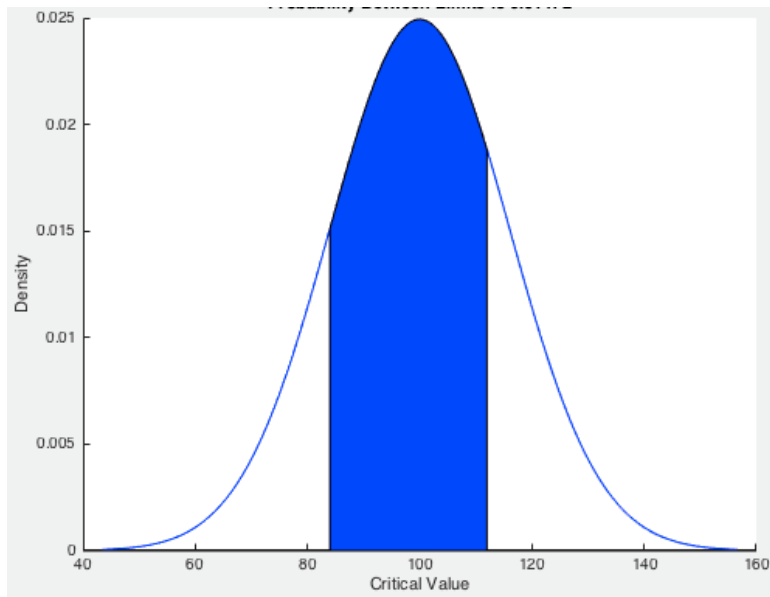
$X \sim N(100,16^2)$	$X \sim N(100,16^2)$
$X \sim N(100,16^2)$	$X \sim N(50,4^2)$