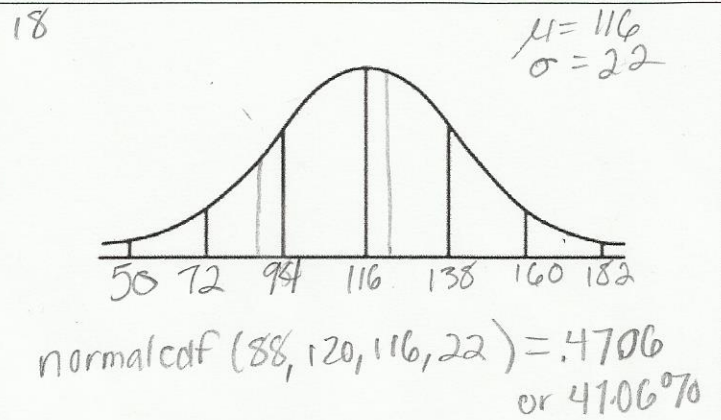
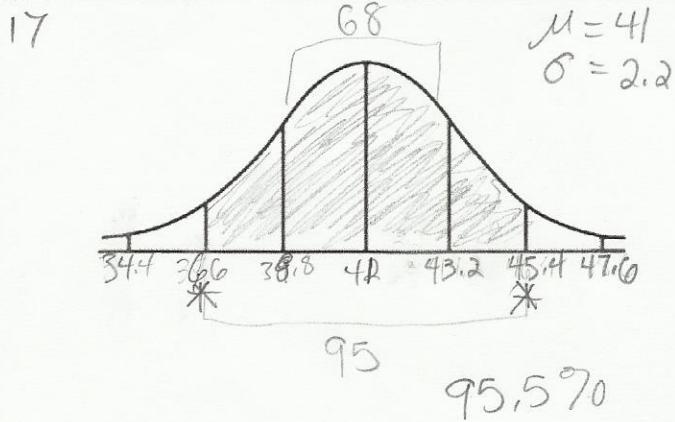


Rest of Study Guide from class

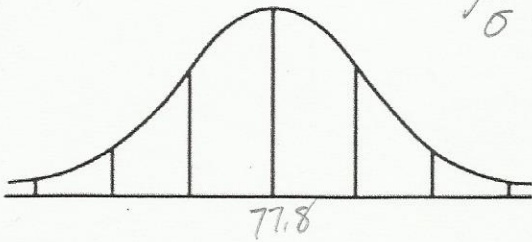
15 Under coverage

16 Leading question



19)

$\mu = 77.8$
 $\sigma = 3.3$



$\frac{55\%}{2} = 27.5\%$

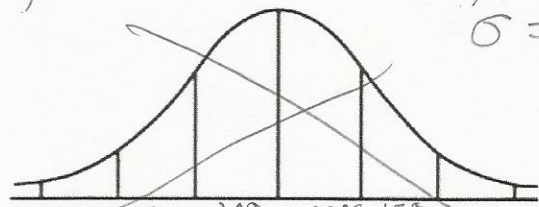
Lower $\text{invnorm}(0.5 - 0.275, 77.8, 3.3) = 75.31$

Upper $\text{invnorm}(0.5 + 0.275, 77.8, 3.3) = 80.29$

$75.31 - 80.29$

20.)

$\mu = 62$
 $\sigma = 5.5$



15% A, 20% B, 30% C, 20% D, 15% F
 35%

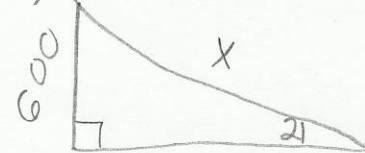
65%

upper $[\text{invnorm}(1 - 0.35, 62, 5.5) = 64.12]$
lower $[\text{invnorm}(1 - 0.65, 62, 5.5) = 59.88]$
 $64.12 \rightarrow 59.88$ (C's)

21)

$\frac{2x}{2} = \frac{18}{2}$ $y = x\sqrt{3}$
 $x = 9$ $y = 9\sqrt{3}$

22.)

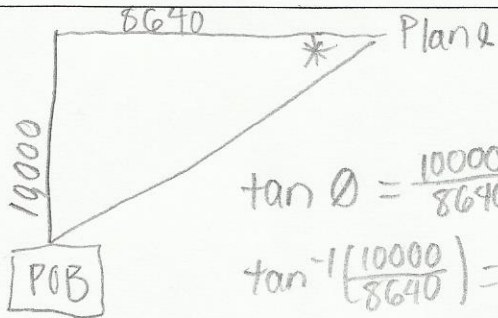


$x \sin 21 = \frac{600}{x} \times x$

$x \sin 21 = 600$
 $\frac{x \sin 21}{\sin 21} = \frac{600}{\sin 21}$

$x = 1674.26$

23.)

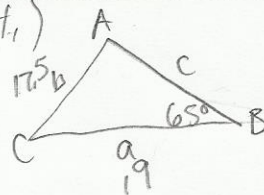


$\tan \theta = \frac{10000}{8640}$

$\tan^{-1}\left(\frac{10000}{8640}\right) = \theta$

$\theta = 49.17$

24.)



$\frac{a}{\sin A} = \frac{b}{\sin B}$

$\frac{19}{\sin A} = \frac{17.5}{\sin 65}$

$\frac{19 \sin 65}{17.5} = \frac{17.5 \sin A}{17.5}$

$\sin^{-1}\left(\frac{19 \sin 65}{17.5}\right) = A$

$A = 79.73$

$$26.) a^2 = b^2 + c^2 - 2bc \cos A$$

$$b=12 \quad a^2 = 12^2 + 6.5^2 - 2(12)(6.5) \cos 47$$

$$c=6.5 \quad a^2 = 144 + 42.25 - 156 \cos 47$$

$$A=47 \quad a^2 = 186.25 - 156 \cos 47$$

$$\sqrt{a^2} = \sqrt{79.86}$$

$$a = 8.94$$

27.)