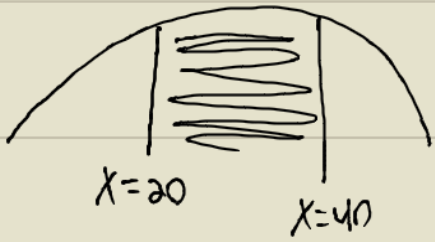


10. $\mu = 30$ $\sigma = 5$
 $P(20 < X < 40)$

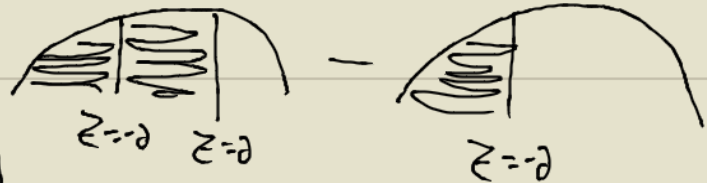
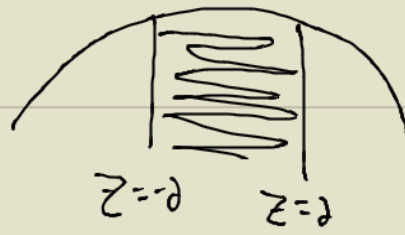


$$z = \frac{x - \mu}{\sigma}$$

$$z = \frac{20 - 30}{5} = -\frac{10}{5} = -2$$

$$z = \frac{x - \mu}{\sigma}$$

$$z = \frac{40 - 30}{5} = \frac{10}{5} = 2$$



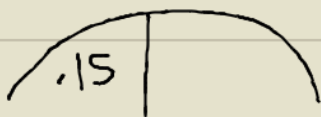
2.00 → 0.0540
 2.0 → 0.9772

0.9772 - 0.0540 = 0.9232

0.9232

11. $\mu = 30$ $\sigma = 5$
 15TH PERCENTILE

$z = \frac{x - \mu}{\sigma}$



$z : -1.04 \rightarrow 0.15$

$z = -1.04$

$z = \frac{x - \mu}{\sigma}$

$-1.04 = \frac{x - 30}{5}$

$5(-1.04) = x - 30$

$-5.2 = x - 30$

$30 - 5.2 = x$

$24.8 = x$