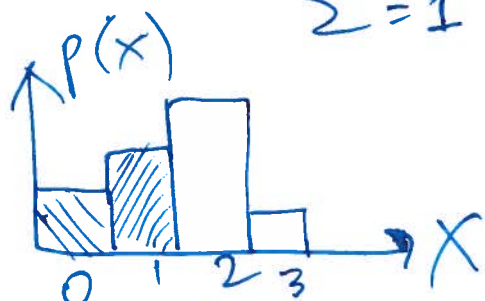


last class

## DISCRETE

$x$	$P(x)$
0	0.2
1	0.3
2	0.4
3	0.1
$\Sigma = 1$	

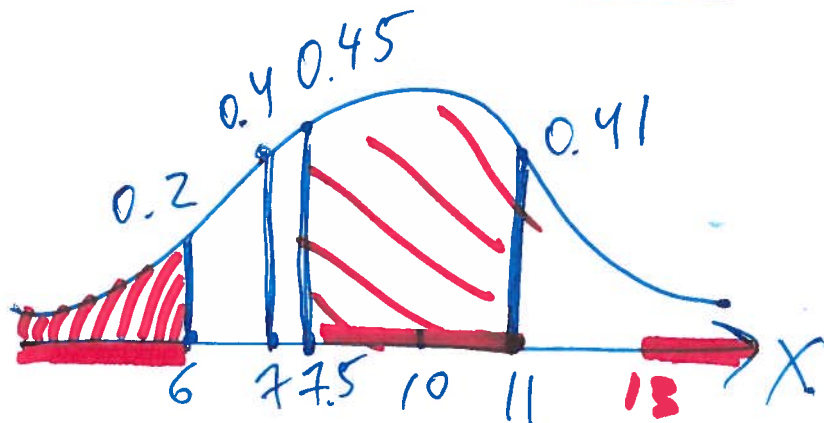


$$P(x=1) = 0.3$$

$$P(x < 1) = P(x=0) = 0.2$$

$$P(x \leq 1) = 0.5$$

## CONTINUOUS

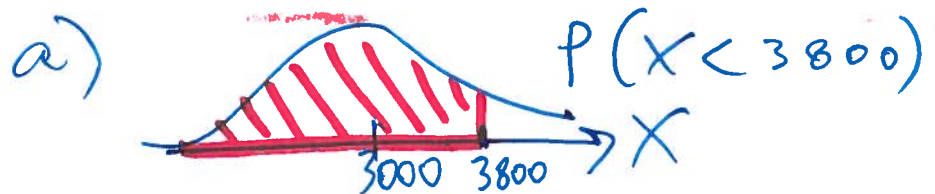
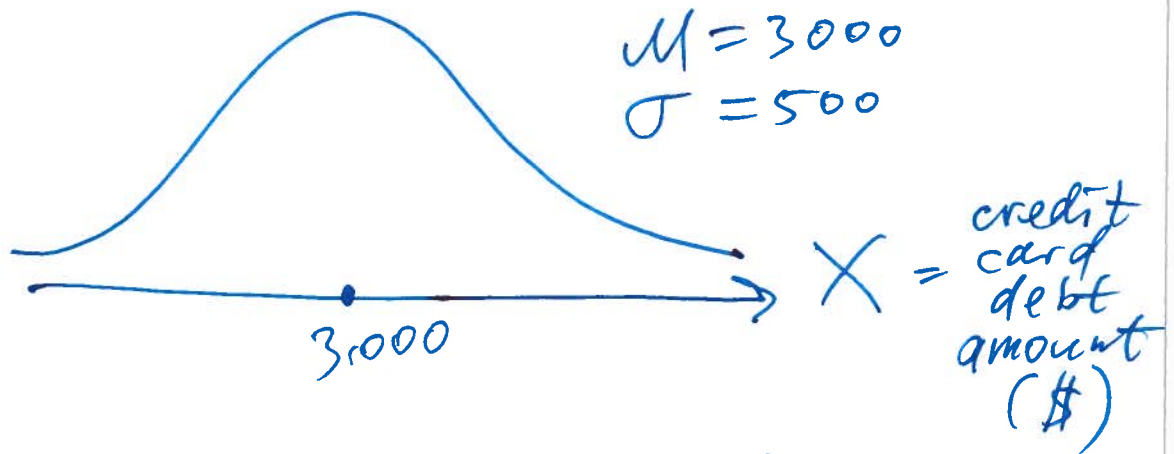


$$P(X=6) = 0$$

$$P(X < 6) = 0.15$$

$$P(X \leq 6) = 0.15$$

# Slide 16



b)

c)

( see  
Excel  
file )

(Slide 17)

$X$  = weekly demand



$$\mu = 50,000$$
$$\sigma = 14,000$$

a)  $Y = X + X + \dots + X_{52}$

$$P(2,400,000 < Y < 2,700,000) = .815$$

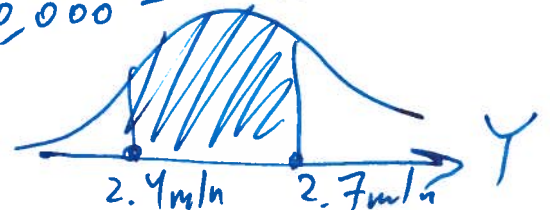
$$P(Y < 2,700,000) - P(Y < 2,400,000)$$

$$\mu_Y = 52 \cdot 50,000 = 2,600,000 = 2.6 \text{ m/n}$$

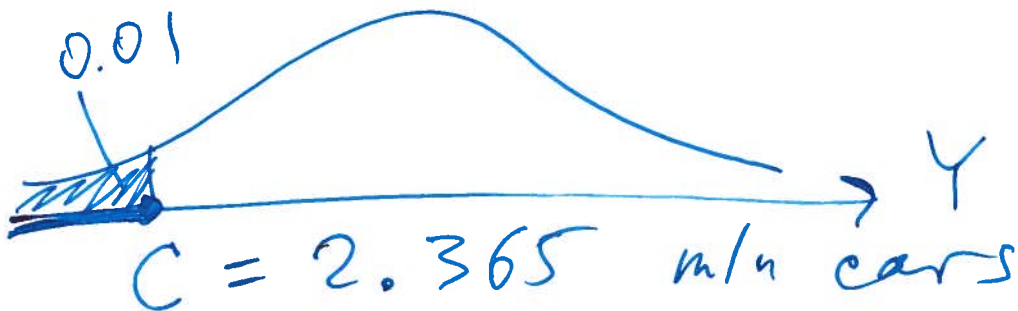
$$\sigma_Y = \sqrt{52 \cdot (14,000)^2}$$

$$= \sqrt{52} \cdot 14,000$$

$$= 0.101 \text{ m/n}$$



b)



c)

