

$$= (1 - e^{x \times 10}) - 1 - e^{x \times 5}$$

$$E(X) = 6$$

$$b) = P(0 \leq Z \leq 1)$$

$$= P(Z \leq 1) - P(Z \leq 0)$$

$$= P(Z \leq 1) - .5$$

$$.8913 - .5$$

$$c) P(-2.50 \leq Z \leq 2.50)$$

$$P(-c \leq Z \leq c)$$

$$P(Z \leq c) - P(Z \leq -c)$$

$$P(Z \leq c) - 1$$

$$= 2 \cdot P(Z \leq 2.50) - 1 =$$

$$2 \cdot .9938 - 1$$

5

$$d) P(Z \geq 1.5) \\ = 1 - P(Z \leq 1.50)$$

$$g) P(Z \leq 0) = .4838$$

$$b) P(0 \leq Z \leq 0) = .291$$

$$a) P(X \leq 1.5) \\ P\left(\frac{X - \mu}{\sigma} \leq \frac{1.5 - \mu}{\sigma}\right) \\ \underline{P(Z \leq 0)}$$

$$b) P(X > 0.25) \\ P\left(Z > \frac{.25 - \mu}{\sigma}\right)$$

$$c) P\left(Z < \frac{d - .13}{.06}\right) = .95 = 1.64$$