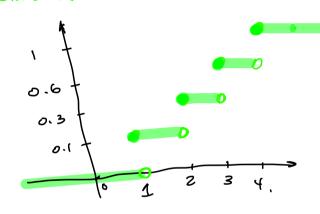
Vonable Meatonia

tjercices	4
	_/

Variable Aleatoria

La siguiente tabla recoge la función de distribución de la v.a. X cuya función de probabilidad es: Fine Distorveion.

		x_i	
		[-∞,1)	
$f(x) = \begin{cases} 0.1x \\ 0 \end{cases}$	1x x = 1, 2, 3, 4	[1,2)	
	en el resto.	[2,3)	
	en el lesto.	[3,4)	
		[4,+∞)	



Calcula las siguientes probabilidades:

a)
$$P(X = 3)$$

b)
$$P(X = 2.5)$$

b)
$$P(X = 2.5)$$

c) $P(X \le 2.5) = \mp (2.5) = 0.3$

d)
$$P(X < 3)$$

e)
$$P(X \ge 2)$$

f)
$$P(2 < X \le 4)$$

g)
$$P(2 < X < 4)$$

0,1 0,3

0,6 1.0

a)
$$P(x=3) = \pm (3) - \mp (2) = 0.6 - 0.3 = 6.3.$$

$$P(x=3) = P(x \le 3) \cdot P(x \le 2).$$
b) $P(x = 2.7) = 0.$

$$P(X \le 3) \quad P(X \le 2).$$
6)
$$P(X = 2.7) = 0.$$
6)
$$P(X \le 2.7) = +(2.7) = 0.3.$$
6)
$$P(X \le 2.7) = +(2.7) = 0.3.$$

6)
$$P(X=2.7)=0.$$

c) $P(X \ge 2.7) = \pm (0.7)=0.3.$
d) $P(X \ge 3) = P(X \le 2) = \mp (2) = 0.3.$

d)
$$P(X < 3) = P(X < 2) = + (2)$$

e) $P(X < 2) = 1 - P(X < 2) = 1 - P(X < 1) = 1 - F(1)$
= $1 - 0.1 = 0.9$.

$$P(X < 3) = P(X < 2) = 1$$
e) $P(X > 2) = 1 - P(X < 2) = 1 - P(X < 1) = 1 - 0.1 = 0.9$

a)
$$P(X < 3) = P(X < 2) = 0$$
e) $P(X > 2) = 1 - P(X < 2) = 1 - P(X < 1) = 1$

$$= (-0.1 = 0.9)$$

e)
$$P(x=2) = 1 - P(x<2) = 1 - 0.1 = 0.9$$

= $1 - 0.1 = 0.9$.
f) $P(2 < x \le 4) = P(x \le 4) - P(x \le 2)$.

 $=\mp(4)$ $-\mp(2)$ = 1-0.3=0.7. 9) P(2CXC4) = P(X=3) = +(3)-F(2)=0.3.