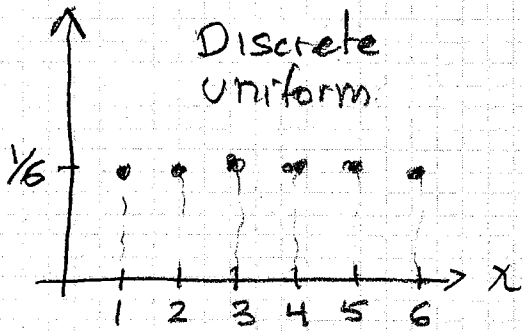
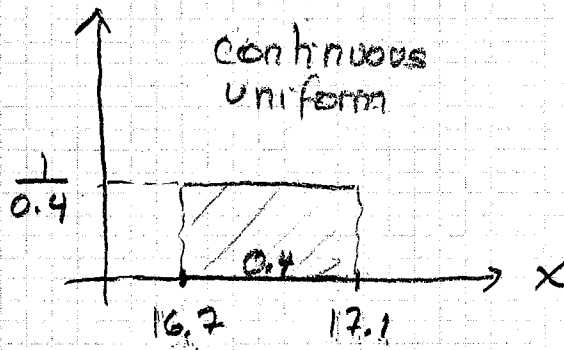


THE UNIFORM DISTRIBUTION

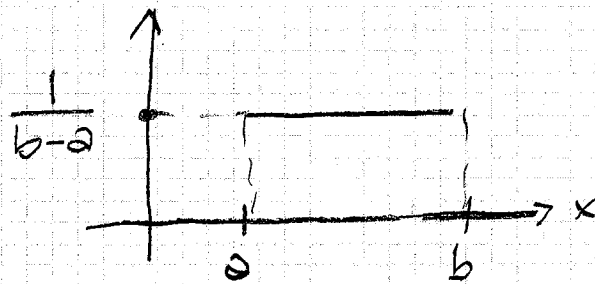


Throwing a fair six-side die.
 $x =$ number on top

x	$P(x)$
1	$1/6$
2	$1/6$
3	$1/6$
4	$1/6$
5	$1/6$
6	$1/6$



Ounces in a bottle of water
 (16.9)



$$\mu = \frac{a+b}{2}$$

$$\sigma = \frac{b-a}{\sqrt{12}}$$

Example: what is the probability that a bottle of water contains
 a) between 16.8 and 17.0 ounces?
 b) exactly 16.8 ounces?

Solution

$$(17.0 - 16.8) \times \frac{1}{0.4} = 0.5$$

$$= P(16.8 \leq x \leq 17.0)$$

$$b) P(x = 16.8) = 0$$

