

Dr. Bensmail

NAME:.....

SS#.....

**Exercise 1:**

...Calculate:

1.  $P(0.5 < z < 2.1)$ .....
2.  $P(z > 2.3)$ .
3.  $p(z < 0.5)$ .....

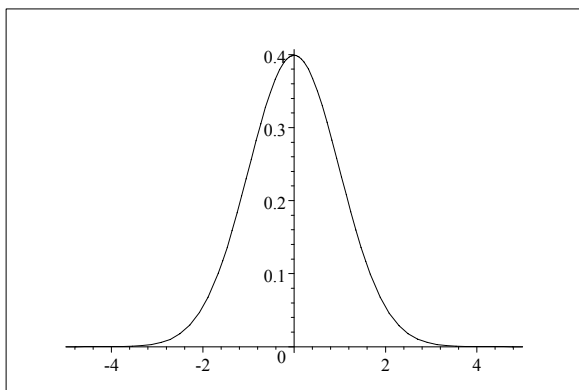
calculate  $z^*$  such that  $p(-z^* < Z < z^*) = 0.78$ .....

**Exercise 2:**

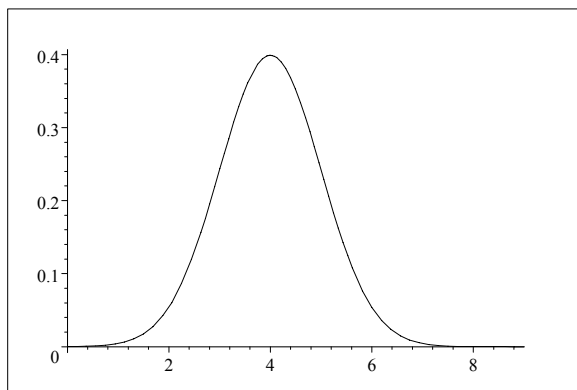
Suppose that  $x$  a random variable from a sample that has a **binomial** distribution with  $n = 5$  and  $p = 0.6$ .

1. calculate
  - $P(x = 2)$
  - $P(x = 5)$
  - $P(x = 1)$

.....  
..Exercise 4:



Plot 1



Plot 2

Please fill what is missing.

**Plot 1** is the probability curve of a .....

**Plot 2** is the probability curve of a.....

The mean of the density function given by the **Plot 1** is  $\mu = \dots\dots\dots$   
The mean of the density function given by the **Plot 2** is  $\mu = \dots\dots\dots$