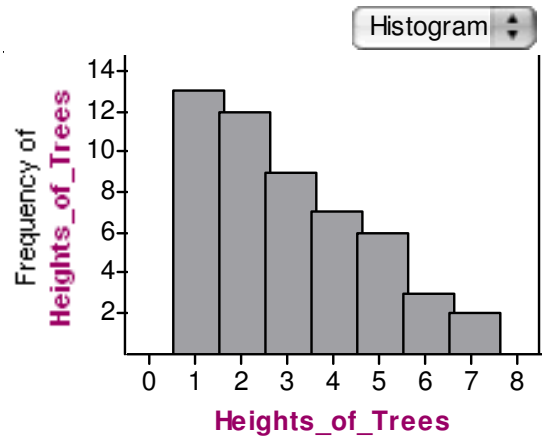
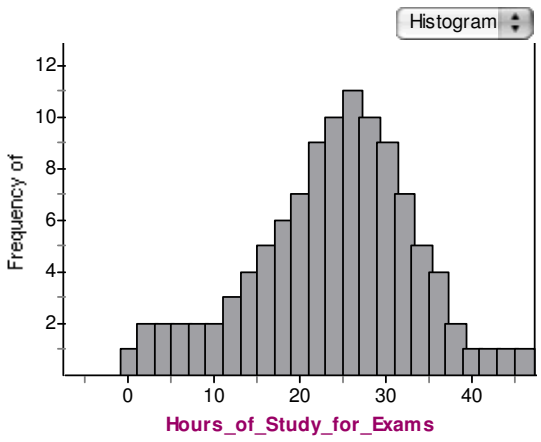
1. Name the following distributions.

a.



b.



2. Sally is 164 cm tall. In her school, the girls heights are normally distributed with a mean of 168cm and a standard deviation of 4cm.
   a. What is the probability that Sally's friend Joanne is taller than she is?
   b. What is the probability that Joanne is between 164cm and 172cm tall?

3. The daily sales of Gary's chip truck has a mean of $675.00 and a standard deviation of $35.50.
   a. What percent of time will the daily sales be greater than $639.50?
   b. What percent of time will the daily sales be less than $746.00?

4. The mean household income in Kingston is $45000 with a standard deviation of $15000. Household incomes below $30000 will receive a tax credit, household incomes between $30000 and $75000 will have to pay a 2% tax, and household incomes over $75000 will have to pay a 5% tax.
   a. What percentage of households will have to pay a 2% tax
   b. What percentage of households will not have to pay tax
   c. What percentage of households will pay tax.

5. An elite university only accepts the top 2.5% of students within the province to attend their university. Last year the student's average marks were normally distributed with a mean of 75% and a standard deviation of 7.5%. What average is needed in order to attend this university?