Reaction Times

Task Two

As in task 1, reaction distances from the bottom of the ruler are normally distributed with a mean of 120 mm and a standard deviation of 36.0 mm.

A suitably shaded diagram or use of a correct probability statement, for example, is the minimum expected for each problem

1. What is the probability that a student will catch the ruler between 120 mm and 139.8 mm from the end? 0.20884
2. What is the probability that a student catches the ruler at less than 139.8 mm from the end? 0.70884
3. What is the probability that a student catches the ruler at more than 174 mm from the end? 0.066807
4. What is the probability that a student will catch the ruler between 125.0 mm and 142 mm from the end? 0.1742
5. What percentage of the students will catch the ruler less than 115 mm from the end? 0.44476 = 44.5%
6. From 82 students how many can be expected to catch the ruler between 115 mm and 142 mm from the end? 0.28466 x 82 = 23 students
7. Above which length will 10% of reaction distances lie?

   116.1 mm.