

## Grading on a (Normal Model) Curve

Scores on a 100 point statistics exam are modeled using a normal model with  $\mu=72$  and  $\sigma=8$ .

1. Suppose the professor uses a straight percentage scale, that is 90 and above is an A, 80 up to 90 is a B, 70 up to 80 is a C, 60 up to 70 is a D and below 60 is an F.

(a) With this scale, what proportion of students will get F's?

(b) With this scale, what proportion of students will get A's?

(c) With this scale, what proportion of students will get C's?

2. Suppose the professor wants to set a scale so that 18% of students get A's, 26% of students get B's, 38% of students get C's, 14% of students get D's and 4% of students get F's.

(a) What should the cutoff for A's be?

(b) What is the cutoff for an F?

(c) What is the lowest score you can get, and still get a C?