

Preview For ACS-Sandardized Final Exam

1. 70 Multiple Choice questions. Each has four possible answers.
2. Scoring is based on correct answers. If you don't know the answer, it pays to guess. It especially pays to rule out one or two obviously incorrect answers, even if you aren't sure about which answer is actually correct.
3. Total time will be 110 minutes. This means you have 1 minute and 34 seconds per question. Time management is important, but most students complete in time. A more common error than going too slow is to work too fast, hurrying early in the test and not taking enough time to carefully read through the questions and look at all of the answers. I think it is foolish to ever leave before time expires on a multiple choice exam, because the time wasted by leaving early will usually be enough to have rechecked several guess problems and to have eliminated some impossible answers. If time permits, you would like to answer the problem on your own, and then see if your answer matches one of the listed alternatives.
4. Calculators are permitted and needed! Bring a pencil.
5. Scores, Percentiles, and Grades

The statistical analysis is based on the performance of thousands of students from 64 colleges. Shown below are some raw scores with the corresponding national percentiles and the grade that would correspond.

<u>Raw</u>	<u>Percentile</u>	<u>Grade</u>	<u>Raw</u>	<u>Percentile</u>	<u>Grade</u>
16	0	F	39	45	B
17	1	F	40	49	B (average!)
(17.5 should be the statistically average score of a monkey guessing!)			41	52	B
20	2	F	46	67	B
26	9	F	50	78	B
27	11	D	51	80	A
30	18	D	53	84	A
31	20	C	55	88	A
33	26	C	60	95	A
36	35	C	66	99	A
38	42	C	67	100	A

6. In terms of subject distribution, questions are divided fairly equally between material introduced throughout the year. There really aren't any shortcuts. However, there is a KEY: there is relatively minimal plug-and-chug stuff. There are hardly any formulas you need to memorize, and relatively few that you'll need to use, other than simple ones (like molarity, grams/moles,...). It's much more geared to whether you understand what's going on.

Study strategy: Study hard, and it will pay off. I would probably work strictly from the notes if my time was limited. I would probably do minimal studying from the text directly. Old practice tests would be useful. Reconsidering book problems would be excellent.

How much should you study from 350? I would go through all of your 350 notes (and practice tests, if you have such) early on, just so that you know how much you remember and how much you have forgotten. My expectation is that some of the old material will now seem more easy than it did originally.

What will it Take to Get a Target Grade?

A = 80th percentile B = 45th percentile C = 20th percentile D = 10th percentile

What will it Take to Get a C?

Certain 10 → 20

50/50 Guess 20 → 10

Clueless 40 → 10

Total 70 → 40 = 35th percentile = C

What will it Take to Get a B?

Comfortable B:

Certain 20 → 20

50/50 Guess 20 → 10

Clueless 30 → 7

Total 70 → 37 = 64th percentile = B

What will it Take to Get an A?

Comfortable A:

Certain 35 → 35

50/50 Guess 20 → 10

Clueless 15 → 4

Total 70 → 49 = 88th = A

Summary: The above analysis suggests that if you know only 35 (half) for sure, you will get an A! If you know even 20 for sure, you can get a B! If you know even so much as 10 for sure, you are likely to get a C! While you will not get them all right (a student can totally guess on 15 problems and still get an A!), the key is that you get at least some of them absolutely certain, and can make an educated guess on a reasonable portion of the rest.

Special Grade Incentive

90th percentile → Special A

Even if semester numbers wouldn't justify

80th percentile → Special B

Even if semester numbers wouldn't justify

70th percentile → Special C

Even if semester numbers wouldn't justify

Score-Handling: I will take your raw score, convert it to a percentile score, and then use a complex equation to curve that to what a normal score would be out of 100 points. I will then multiple that by 1.5 so that it ends up worth 150 points!