Canadian Institute of Actuaries
Casualty Actuarial Society


# Pass Mark for Exam 1/P 

# Pass Marks on Joint CAS/CIA/SOA Multiple-Choice Exams 

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Exam $1 / \mathrm{P}$ is jointly administered by the Casualty Actuarial Society and the Society of Actuaries and is cosponsored by the Canadian Institute of Actuaries.

## What Is The Pass Mark?

One of the most frequently asked questions about the multiple-choice actuarial examinations is, "What was the pass mark for the exam?" In other words, "How many questions did I need to answer correctly on the exam to pass?" In the few weeks that follow the release of grades (on the familiar $0-10$ scale), this question is asked repeatedly of the SOA Education and Examination staff by various interested parties such as exam candidates, employers, and others who are just plain curious. Until now, everyone has gotten the same answer: Pass marks for all SOA examinations (including those jointly sponsored with the CAS) are confidential. However, that is now changing.

## Multiple-Choice Examination Pass Marks To Be Released

The CAS Board of Directors and SOA Board of Governors both passed resolutions in June 2007 requiring that pass marks be released for all multiple-choice examinations beginning with those to be given in November 2007. The grades for those exams, using the familiar $0-10$ scoring system, will be released to candidates in January 2008. The multiple-choice exam pass marks will be published on the SOA and CAS Web sites as percentages, rounded up if necessary to the nearest whole percent. Exam P/1 is administered via computer-based testing. As such, multiple forms of the exam are given and the number of correct answers needed to pass may differ from one candidate to another. For this exam, information about the range of passing scores will be provided.

## A Word About the $\mathbf{0 - 1 0}$ Grades

The $0-10$ grading scale, with scores of 6 and greater being passing grades, will continue to be used on all SOA exams. Raw scores are converted to $0-10$ scores using increments of 10 percent of the pass mark. For example:

- A grade of 6 represents raw scores of at least 100 percent, but less than 110 percent of the pass mark.
- A grade of 5 represents raw scores of at least 90 percent but less than 100 percent of the pass mark.
- A grade of 0 represents raw scores that are less than 50 percent of the pass mark.
- A grade of 10 represents raw scores of at least 140 percent of the pass mark.

When setting the pass marks for the actuarial exams (multiple-choice or written-answer), the examination committees have one goal in mind: separating candidates who have demonstrated adequate knowledge of the material - and therefore deserve to pass - from those who have not demonstrated such knowledge. Scores are only meant to give candidates a relative idea of how close or far away they were from passing or failing and are not factored in when pass mark discussions are held. Consequently, on rare occasions there have been exams on which achieving a grade of 10 was not possible - even for a perfect paper. For example, let's say the pass mark was 22 for a 30-question exam. One would have to achieve a score of 30.8 (140 percent of 22) to score a 10. Therefore, a grade of 9 would be the highest possible score by candidates on this exam.

## Exam 1/P Pass Mark

| Exam | Pass Mark* | Number of <br> Exams | Effective <br> Number of <br> Exams | Number <br> Passing | Percent <br> Passing | Percent <br> Effective <br> Passing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| November 2013 | $68 \%$ | 2691 | 2309 | 1138 | 42.3 | 49.3 |
| September 2013 | $68 \%$ | 2856 | 2426 | 1198 | 41.9 | 49.4 |
| July 2013 | $68 \%$ | 3543 | 3017 | 1509 | 42.6 | 50.0 |
| March 2013 | $64 \%$ | 2888 | 2485 | 1149 | 39.8 | 46.2 |
| January 2013 | $64 \%$ | 3513 | 3062 | 1533 | 43.6 | 50.1 |
| Nov. 2012 | $64 \%$ | 2557 | 2137 | 965 | 37.7 | 45.2 |
| Sept. 2012 | $64 \%$ | 2425 | 2039 | 880 | 36.3 | 43.2 |
| July 2012 | $63 \%$ | 3188 | 2725 | 1250 | 39.2 | 45.9 |
| May 2012 | $63 \%$ | 2831 | 2413 | 1106 | 39.1 | 45.8 |
| March 2012 | $63 \%$ | 2342 | 1977 | 891 | 38.0 | 45.1 |
| Jan. 2012 | $63 \%$ | 2973 | 2574 | 1243 | 41.8 | 48.3 |
| Nov. 2011 | $63 \%$ | 2574 | 2251 | 1098 | 42.7 | 48.8 |
| Sept. 2011 | $61 \%$ | 2380 | 2027 | 947 | 39.8 | 46.7 |
| July 2011 | $63 \%$ | 2851 | 2503 | 1136 | 39.8 | 45.4 |
| May 2011 | $63 \%$ | 3093 | 2707 | 1362 | 44.0 | 50.3 |
| March 2011 | $63 \%$ | 2154 | 1860 | 891 | 41.4 | 47.9 |
| Jan. 2011 | $63 \%$ | 3020 | 2697 | 1350 | 44.7 | 50.1 |
| Nov. 2010 | $63 \%$ | 2127 | 1888 | 902 | 42.4 | 47.8 |
| Sept./Oct. 2010 | $63 \%$ | 1766 | 1528 | 666 | 37.7 | 43.6 |


| July/Aug. 2010 | $63 \%$ | 2681 | 2421 | 1188 | 44.3 | 49.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| May/June 2010 | $63 \%$ | 2699 | 2427 | 1239 | 45.9 | 51.1 |
| Mar./Apr. 2010 | $63 \%$ | 2571 | 2275 | 1039 | 40.4 | 45.7 |
| January 2010 | $63 \%$ | 2575 | 2315 | 1094 | 42.5 | 47.3 |
| November 2009 | $63 \%$ | 2596 | 2255 | 1067 | 41.1 | 47.3 |
| September 2009 | $63 \%$ | 2436 | 2113 | 943 | 38.7 | 44.6 |
| July 2009 | $63 \%$ | 2751 | 2348 | 1047 | 38.1 | 43.7 |
| May 2009 | $63 \%$ | 3017 | 2626 | 1147 | 38.0 | 43.7 |
| March 2009 | $62 \%$ | 2888 | 2392 | 1110 | 38.4 | 46.4 |
| January 2009 | $62 \%$ | 2664 | 2204 | 1021 | 38.3 | 46.3 |
| November 2008 | $63 \%$ | 2627 | 2112 | 955 | 36.4 | 45.2 |
| September 2008 | $62 \%$ | 2536 | 2037 | 895 | 35.3 | 43.9 |
| July 2008 | $62 \%$ | 3022 | 2478 | 1127 | 37.3 | 45.5 |
| May 2008 | $63 \%$ | 3321 | 2902 | 1158 | 34.9 | 39.9 |
| February 2008 | $59 \%$ | 3416 | 2988 | 1494 | 43.7 | 50.0 |
| November 2007 | $68 \%$ | 3142 | 2770 | 1181 | 37.6 | 42.6 |

* The Pass Mark for Computer Based Testing: Examination P/1 is administered using computer-based testing (CBT). Under CBT, it is not possible to schedule everyone to take the examination at the same time. As a result, each administration consists of multiple versions of the examination given over a period of several days. The examinations are constructed and scored using Item Response Theory (IRT). Under IRT, each operational item that appears on an examination has been calibrated for difficulty and other test statistics and the pass mark for each examination is determined before the examination is given. All versions of the examination are constructed to be of comparable difficulty to one another. For the November 2007 administration of Examination $\mathrm{P} / 1$, the average percentage of questions answered correctly by those candidates who received a grade of 6 was $68 \%$, while the average percentage of questions answered correctly by those candidates who received a grade of 5 was $60 \%$.

