

1.(1 pt) Use normal approximation to estimate the probability of getting less than 51 girls in 100 births. Assume that boys and girls are equally likely.

**WARNINGS:**

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* This option —8— is not recognized in this subroutine
HASH(0x8c1a530) TABLE border = "2" cellpadding = "3" BGCOLOR = "#FFFFFF" tr TD 8-
/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 28
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
—— PGtranslator::translate called at /var/www/cgi-bin/webwork/system/cgi-scripts-
/welcomeAction.pl line 590
—— main::createTexSource called at /var/www/cgi-bin/webwork/system/cgi-scripts-
/welcomeAction.pl line 353
—— main::downloadAllSets called at /var/www/cgi-bin/webwork/system/cgi-scripts-
/welcomeAction.pl line 160
```

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HASH(0x8c1a530) TABLE border = "2" cellpadding = "3" BGCOLOR = "#FFFFFF" tr TD 8-
/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 29
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
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/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 30
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
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/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 31
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
—— PGtranslator::translate called at /var/www/cgi-bin/webwork/system/cgi-scripts-
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/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 32
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
—— PGtranslator::translate called at /var/www/cgi-bin/webwork/system/cgi-scripts-
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/welcomeAction.pl line 353
—— main::downloadAllSets called at /var/www/cgi-bin/webwork/system/cgi-scripts-
/welcomeAction.pl line 160
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2.(1 pt) Use normal approximation to estimate the probability of passing a true/false test of 70 questions if the minimum passing grade is 70% and all responses are random guesses.

**WARNINGS:**

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* This option —8— is not recognized in this subroutine
HASH(0x8c1a908) TABLE border = "2" cellpadding = "3" BGCOLOR = "#FFFFFF" tr TD 8-
/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 28
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
—— PGtranslator::translate called at /var/www/cgi-bin/webwork/system/cgi-scripts-
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3.(1 pt) An airline company is considering a new policy of booking as many as 184 persons on an airplane that can seat only 170.5. (Past studies have revealed that only 82% of the booked passengers actually arrive for the flight.) Estimate the probability that if the company books 184 persons, not enough seats will be available.

**WARNINGS:**

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* This option —8— is not recognized in this subroutine
HASH(0x8c1d6e4) TABLE border = "2" cellpadding = "3" BGCOLOR = "#FFFFFF" tr TD 8-
/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 28
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```

4.(1 pt) A multiple-choice test consists of 26 questions with possible answers of a, b, c, d. Estimate the probability that with random guessing, the number of correct answers is at least 11.

**WARNINGS:**

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* This option —8— is not recognized in this subroutine
HASH(0x8c1d9cc) TABLE border = "2" cellpadding = "3" BGCOLOR = "#FFFFFF" tr TD 8-
/TTDD = gt; /td td nbsp; /td /tr /table at (eval128) line 3674.
##More details:
—— main::set_default_options called at (eval 134) line 447
—— main::romberg called at (eval 137) line 64
—— main::normal_prob called at (eval 53) line 32
—— main::_ANON_ called at /usr/lib/perl5/5.8.0/i386-linux-thread-multi/Safe.pm line 223
—— Safe::reval called at /var/www/webwork/system/lib/PGtranslator.pm line 714
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