

Third Quarter Assignments

IB Precalculus

Wed., Jan. 8 §6.2	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Solve problems involving geometry and right triangle trigonometry. line of sight, angle of elevation, angle of depression §6.2 10, 11
Thurs., Jan. 9 §6.3	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Define the trigonometric functions outside the first quadrant. Find triangle areas. trigonometric functions of any angle (versus of a real number), triangle area formula §6.3 1bd, 2bcd, 3, 7ab, 9, 10a
Fri., Jan. 10 §6.3	Three approved IA ideas are due by midnight on Friday, Jan. 10. <i>Goals</i> <i>Assignment</i>	Find the angle between two lines. Use the connection between slope and angle with the positive x -axis. §6.3 16c, 17b
Mon., Jan. 13 §6.4	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Use the law of sines. law of sines, ASA, AAS, SSA, ambiguous case §6.4 1abe, 2ae
Tues., Jan. 14 §6.4	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Solve triangles using the laws of sines and cosines. law of cosines, SAS, SSS §6.4 2bcf, 3, 6, 14
W-Th, Jan. 15-16 §6.4	<i>Goals</i> <i>Assignment</i>	Solve triangle word problems using a variety of techniques. Ch. 6 practice problems 23, 26 (due Tuesday); Trigonometry applications (due Wed./Thurs.)
Fri., Jan. 17 Activity day	<i>Goals</i> <i>Assignment</i>	Solve problems from the Functions section of the IB Math A&A syllabus. Solve triangle word problems using a variety of techniques. If you are not at an activity, you can use this time to work on upcoming assignments.
Tues., Jan. 21 §6.4	<i>Goals</i> <i>Assignment</i>	Solve triangle word problems using a variety of techniques. Trigonometry applications
W-Th, Jan. 22-23 Review	<i>Goals</i> <i>Assignment</i>	Solve problems involving triangle trigonometry and geometry. Study for the test.
Fri., Jan. 24 Test, Ch. 6, pt. 1	<i>Goals</i> <i>Assignment</i>	Solve problems involving triangle trigonometry and geometry. Test, Geometry and Trigonometry, part 1
Mon., Jan. 27 Test, Ch. 6, pt. 2	<i>Goals</i> <i>Assignment</i>	Solve problems involving triangle trigonometry and geometry. Test, Geometry and Trigonometry, part 2
Tues., Jan. 28 §7.1	IB Functions 2 worksheet due <i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Use statistical vocabulary. Represent data in various ways. population, sample, descriptive statistics, experimental unit, variable, data, data set, numerical, quantitative, categorical, qualitative, discrete, continuous §7.1 3, 4 IB Geometry and Trigonometry 1 worksheet assigned, due Fri., Feb. 21
W-Th, Jan. 29-30 §7.1	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Use statistical vocabulary. Represent data in various ways. frequency distribution, frequency, class, interval, interval boundaries, mid-interval value, histogram, modal class, cumulative frequency distribution, relative cumulative frequency distribution, ogive, cumulative frequency graph §7.1 5, 8; use graph paper for the three graphs in #5 and a spreadsheet for the two graphs in #8. Upload the spreadsheet (.xlsx) file to the assignment on Schoology. You must follow the rules from the notes about how the graphs should be constructed.
Fri., Jan. 31 §7.1	<i>Goals</i> <i>Assignment</i>	Represent data in various ways. §7.1 10; use a spreadsheet for the graph. Follow the rules from the notes on constructing it. Answer all parts of the question in the spreadsheet file (.xlsx) that you upload to Schoology. You will be using the data again in a later assignment.
Mon., Feb. 3 §7.1	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Identify various sampling methods. representative sample, random sampling, non-random sampling, probability sampling, non-probability sampling, simple random sampling, stratified random sampling, strata, systematic random sampling, simple random sampling, convenience sampling, quota sampling Sampling questions
Tues., Feb. 4 §7.2	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Calculate measures of central tendency measures of central tendency, mean, median, mode, statistic, parameter, arithmetic mean §7.2 2, 6, 7, 9 Make the graphs for #9 with a spreadsheet and upload that part of your work to Schoology.
W-Th, Feb. 5-6 §7.2, 7.3	<i>Goals</i> <i>Vocabulary</i> <i>Assignment</i>	Calculate measures of central tendency and variability. symmetric, skewed, positively skewed, negatively skewed, skewed to the right, skewed to the left, measures of variability, measures of spread, range, standard deviation, variance, percentiles, quartiles, interquartile range, five-number summary, box-and-whisker plot, box plot, outlier §7.2 1, 3, 4, 12; §7.3 9acf Problem #12 uses the data from #10 in §7.1; find that in the spreadsheet you uploaded then.

Fri., Feb. 7 §7.3	Goals Assignment	Calculate measures of variability. §7.3 9be, 10, 16 All three graphs in #9 must be done in a spreadsheet and uploaded to Schoology. Problem #16 again uses the exercise data from the spreadsheet you made for §7.1.
Mon., Feb. 10 §7.4	Goals Vocabulary Assignment	Calculate and interpret the correlation coefficient for a set of data. bivariate statistics, associated, explanatory variable, response variable, independent variable, dependent variable, scatter plot, correlation coefficient, Pearson product-moment correlation coefficient, r , coefficient of determination, r^2 §7.4 2abc, 3abc, 4abc Do these entirely in a spreadsheet that you upload to Schoology. You must compute the correlation coefficients to justify your answers for part (c) of each problem. This file will also be used for the next assignment. In #2, that should be fuel efficiency rather than fuel consumption.
Tues., Feb. 11 §7.4	Goals Vocabulary Assignment	Draw a line of best fit by eye. Calculate and interpret the least-squares linear regression for a set of data. line of best fit, extrapolation, interpolation, least-squares regression line, regression equation Line of best fit by eye worksheet; §7.4 2d, 3d, 4d (equations <i>only</i> , do not interpret gradient) Add part (d) of those problems to the same spreadsheet from last time and upload it again.
W-Th, Feb. 12-13 §7.4	Goals Assignment	Calculate and interpret the least-squares linear regression for a set of data. §7.4 2d, 3d, 4d (interpret gradient <i>only</i> , equations were in last assignment), 7, 8, 10 Make all three required graphs in a spreadsheet and upload that to Schoology. You may type the other answers and use the spreadsheet to calculate other things, too, if it is more convenient.
Fri., Feb. 14 Activity day	Goals Assignment	Solve problems from the Geometry and Trigonometry section of the IB Math A&A syllabus. If you are not at an activity, you can use this time to work on the worksheet.
Tues., Feb. 18 Review	Goals Assignment	Use statistics to describe and make predictions about data. Study for the test.
W-Th, Feb. 19-20 Test, Ch. 7	Goals Assignment	Use statistics to describe and make predictions about data. Test, Statistics
Fri., Feb. 21 §8.1; Geom & Trig 1 ws due	IB Geometry and Trig 1 worksheet due Goals Vocabulary Assignment	Understand simple empirical probability. Represent sample spaces in a variety of ways. probability, empirical/experimental probability, theoretical/mathematical probability, probability distribution, random, haphazard, long-run relative frequency, experiment, random experiment §8.1 2, 4, 6; IB Geometry and Trig 2 worksheet assigned, due Mon., Mar. 24. (Yes, the review worksheet due the first day after spring break — more than a month after you're getting it!)
Mon., Feb. 24 §8.1	Goals Assignment	Understand simple empirical probability. Represent sample spaces in a variety of ways. §8.1 3, 7, 14
Tues., Feb. 25 §8.1	Goals Vocabulary Assignment	Understand simple empirical probability. Represent sample spaces in a variety of ways. set, subset, proper subset, cardinality, complement, \in , \subset , \subseteq , intersection, union, \cap , \cup §8.1 8, 13
W-Th, Feb. 26-27 §8.2	Goals Vocabulary Assignment	Calculate probability. equally likely outcomes, disjoint, mutually exclusive §8.2 1, 3, 4, 6, 7, 10
Fri., Feb. 28 §8.2	Goals Vocabulary Assignment	Calculate probability. geometric probability §8.2 11, 15, 16
Mon., Mar. 3 §8.3	Goals Vocabulary Assignment	Calculate probability of combined events, including conditional probability. intersection, union, independent, conditional probability, given, dependent, not independent §8.3 1, 6, 7, 9, 10
Tues., Mar. 4 §8.3	Goals Assignment	Calculate probability of combined events, including conditional probability. §8.3 13, 24
W-Th, Mar. 5-6 §8.3	Goals Assignment	Calculate probability of combined events, including conditional probability. Ch. 8 practice problems 8, 22, 29
Fri., Mar. 7 §8.3	Goals Assignment	Calculate probability of combined events, including conditional probability. Probability practice
Mon., Mar. 10 Review	Goals Assignment	Calculate probability in a variety of situations, using correct vocabulary and notation. Study for the test.
Tues., Mar. 11 Test, Ch. 8, pt. 1	Goals Assignment	Calculate probability in a variety of situations, using correct vocabulary and notation. Test, Probability, part 1
W-Th, Mar. 12-13 Test, Ch. 8, pt. 2; §12.1	Goals Assignment	Calculate probability in a variety of situations, using correct vocabulary and notation. Test, Probability, part 2; §12.1 1, 5, 6abc
Fri., Mar. 14 Activity day End of third quarter	Today is the last day of the third quarter. The last assignment that counts on the quarter is the last homework before the Ch. 8 test. Goals Assignment	Solve problems from the Geometry and Trigonometry section of the IB Math A&A syllabus. If you are not at an activity, you can use this time to work on the worksheet.