

Glencoe/McGraw-Hill Pacing and Correlation

Glencoe *Geometry* to the California Mathematics Academic Content Standards, Geometry

The total number of days in the suggested Pacing is 169 days including 2 days per chapter for reviewing and testing. This allows for teacher flexibility in planning due to testing, school cancellation, or shortened class periods.

*Pacing Legend:

Basic = This lesson directly addresses a California Math Standard.

Prerequisite = This lesson addresses a prerequisite skill students will need in order to master a California Math Standard.

Optional = This lesson does not directly address any California Math Standard.

Student Edition Lesson	Standard	Pacing*	
		Type of Lesson	Number of Days
Chapter 1	Discovering Points, Lines, Planes, and Angles		
1-1		Prerequisite	1
1-2	1	Basic	2
1-3	8, 10, 11	Basic	2
1-4	1, 15	Basic	2
1-4A		Optional	0
1-5	1, 16	Basic	2
1-6	16	Basic	2
1-7A		Optional	0
1-7	1, 13, 16	Basic	2
Reviewing and Testing			2
Chapter 2	Connecting Reasoning and Proof		
2-1	1, 3	Basic	2
2-2	1, 3	Basic	1 $\frac{1}{2}$
2-2B	3	Basic	$\frac{1}{2}$
2-3	1, 3	Basic	2
2-4	1, 2	Basic	2
2-5	1, 2	Basic	2
2-6	1, 2	Basic	2
Reviewing and Testing			2
Chapter 3	Using Perpendicular and Parallel Lines		
3-1	1	Basic	2
3-2A		Optional	0
3-2	1, 2, 7, 13	Basic	2

Student Edition Lesson	Standard	Pacing*	
		Type of Lesson	Number of Days
3-3	1	Basic	2
3-4	1, 2, 7	Basic	2
3-5	1	Basic	2
3-5B		Optional	0
3-6	1	Basic	2
Reviewing and Testing			2
Chapter 4	Identifying Congruent Triangles		
4-1	12	Basic	2
4-2A	12	Basic	$\frac{1}{2}$
4-2	1, 2, 12	Basic	$1\frac{1}{2}$
4-3	1, 2, 4, 5, 22	Basic	2
4-4A		Optional	0
4-4	1, 2, 4, 5	Basic	2
4-5	1, 2, 3, 4, 5	Basic	2
4-6	1, 2	Basic	2
Reviewing and Testing			2
Chapter 5	Applying Congruent Triangles		
5-1	1, 2	Basic	2
5-2	1, 2	Basic	2
5-3	1, 2, 12	Basic	2
5-4	1, 2	Basic	2
5-5A	12	Basic	$\frac{1}{2}$
5-5	1, 2, 6, 12	Basic	$1\frac{1}{2}$
5-6	1, 2	Basic	2
Reviewing and Testing			2
Chapter 6	Exploring Quadrilaterals		
6-1A		Optional	0
6-1	1, 2, 7	Basic	2
6-2	1, 2, 7	Basic	2
6-3A		Optional	0
6-3	1, 2, 7	Basic	2
6-4	1, 2, 7	Basic	2
6-4B		Optional	0
6-5	1, 2, 7	Basic	2
Reviewing and Testing			2
Chapter 7	Connecting Proportion and Similarity		
7-1	1	Basic	2

Student Edition Lesson	Standard	Pacing*	
		Type of Lesson	Number of Days
7-2	1	Basic	2
7-3	1, 2, 4, 5	Basic	2
7-4	1, 2	Basic	2
7-5	1, 2, 4, 5, 8, 11	Basic	2
7-6	4, 5	Basic	2
7-6B		Optional	0
Reviewing and Testing			2
Chapter 8	Applying Right Triangles and Trigonometry		
8-1A	14, 15	Basic	$\frac{1}{2}$
8-1	1, 14, 15	Basic	$1\frac{1}{2}$
8-2	1, 15, 20	Basic	2
8-3	1, 18, 19	Basic	2
8-4	18, 19	Basic	2
8-5	1, 18, 19	Basic	2
8-6	1, 18, 19	Basic	2
Reviewing and Testing			2
Chapter 9	Analyzing Circles		
9-1	8, 21	Basic	2
9-2	1	Basic	2
9-3	1, 2, 7, 21	Basic	2
9-4	1, 2, 7, 21	Basic	2
9-5A	21	Basic	$\frac{1}{2}$
9-5	1, 7, 15, 21	Basic	$1\frac{1}{2}$
9-6	1, 7, 21	Basic	2
9-7	1, 7, 21	Basic	2
9-8	17	Basic	2
Reviewing and Testing			2
Chapter 10	Exploring Polygons and Area		
10-1	1, 12, 13	Basic	1
10-2A	22	Basic	1
10-2		Optional	0
10-3A	8, 10	Basic	$\frac{1}{2}$
10-3	1, 8, 10	Basic	$1\frac{1}{2}$
10-4	1, 8, 10	Basic	1
10-5A	12	Basic	$\frac{1}{2}$
10-5	1, 8, 11, 12	Basic	$1\frac{1}{2}$
10-6	1	Basic	1
10-7		Optional	0

Student Edition Lesson	Standard	Pacing*	
		Type of Lesson	Number of Days
Reviewing and Testing			2
Chapter 11	Investigating Surface Area and Volumes		
11-1A		Optional	0
11-1		Prerequisite	1
11-1B		Optional	0
11-2	8, 9	Basic	1
11-2B		Optional	0
11-3	8, 9, 11, 15	Basic	1
11-4	9, 11, 15	Basic	1
11-5	8, 9, 11	Basic	1
11-6A	8, 11	Basic	$\frac{1}{2}$
11-6	8, 9, 11	Basic	$1\frac{1}{2}$
11-7	8, 9, 11	Basic	1
11-8	1, 11	Basic	1
Reviewing and Testing			2
Chapter 12	Continuing Coordinate Geometry		
12-1	1, 17	Basic	2
12-2A		Optional	0
12-2		Prerequisite	1
12-3		Prerequisite	1
12-4	2, 17	Basic	2
12-5A		Optional	0
12-5		Optional	0
12-6	1, 15	Basic	2
Reviewing and Testing			2
Chapter 13	Investigating Loci and Coordinate Transformations		
13-1		Optional	0
13-2		Optional	0
13-3	16	Basic	1
13-4	1, 15, 22	Basic	1
13-5	22	Basic	1
13-6A	22	Basic	$\frac{1}{2}$
13-6	1, 22	Basic	1
13-6B	22	Basic	$\frac{1}{2}$
13-7	1, 22	Basic	1
13-8	1	Basic	1
Reviewing and Testing			2

CORRELATION

The California Mathematics Academic Content Standards,
to Glencoe *Geometry: Integration, Applications, Connections*

STANDARDS	LESSON REFERENCES
1. Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning.	1-2, 1-4, 1-5, 1-7, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 4-2, 4-3, 4-4, 4-5, 4-6, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 6-1, 6-2, 6-3, 6-4, 6-5, 7-1, 7-2, 7-3, 7-4, 7-5, 8-1, 8-2, 8-3, 8-5, 8-6, 9-2, 9-3, 9-4, 9-5, 9-6, 9-7, 10-1, 10-3, 10-4, 10-5, 10-6, 11-8, 12-1, 12-6, 13-4, 13-6, 13-7, 13-8
2. Students write geometric proofs, including proofs by contradiction.	2-4, 2-5, 2-6, 3-2, 3-4, 4-2, 4-3, 4-4, 4-5, 4-6, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 6-1, 6-2, 6-3, 6-4, 6-5, 7-3, 7-4, 7-5, 9-3, 9-4, 12-4
3. Students construct and judge the validity of a logical argument. This includes giving counter examples to disprove a statement.	2-1, 2-2, 2-2B, 2-3, 4-5
4. Students prove basic theorems involving congruence and similarity.	4-3, 4-4, 4-5, 7-3, 7-5, 7-6
5. Students prove triangles are congruent or similar and are able to use the concept of corresponding parts of congruent triangles.	4-3, 4-4, 4-5, 7-3, 7-5, 7-6
6. Students know and are able to use the Triangle Inequality Theorem.	5-5
7. Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles.	3-2, 3-4, 6-1, 6-2, 6-3, 6-4, 6-5, 9-3, 9-4, 9-5, 9-6, 9-7
8. Students know, derive, and solve problems involving perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.	1-3, 7-5, 9-1, 10-3A, 10-3, 10-4, 10-5, 11-2, 11-3, 11-5, 11-6A, 11-6, 11-7

STANDARDS	LESSON REFERENCES
9. Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres.	11-2, 11-3, 11-4, 11-5, 11-6 11-7
10. Students compute areas of polygons including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids.	1-3, 10-3A, 10-3, 10-4
11. Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.	1-3, 7-5, 10-5, 11-3, 11-4, 11-5, 11-6A, 11-6, 11-7, 11-8
12. Students find and use measures of sides, interior and exterior angles of triangles and polygons to classify figures and solve problems.	4-1, 4-2A, 4-2, 5-3, 5-5A, 5-5, 10-1, 10-5A, 10-5
13. Students prove relationships between angles in polygons using properties of complementary, supplementary, vertical, and exterior angles.	1-7, 3-2, 10-1
14. Students prove the Pythagorean Theorem.	8-1A, 8-1
15. Students use the Pythagorean Theorem to determine distance and find missing lengths of sides of right triangles.	1-4, 8-1A, 8-1, 8-2, 9-5, 11-3, 11-4, 12-6, 13-4
16. Students perform basic constructions with straightedge and compass such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line.	1-5, 1-6, 1-7, 13-3
17. Students prove theorems using coordinate geometry, including the midpoint of a line segment, distance formula, and various forms of equations of lines and circles.	9-8, 12-1, 12-4
18. Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them, (e.g., $\tan(x) = \sin(x)/\cos(x)$, $(\sin(x))^2 + (\cos(x))^2 = 1$).	8-3, 8-4, 8-5, 8-6
19. Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side.	8-3, 8-4, 8-5, 8-6
20. Students know and are able to use angle and side relationships in problems with special right triangles such as 30-60-90 triangles and 45-45-90 triangles.	8-2
21. Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles.	9-1, 9-3, 9-4, 9-5A, 9-5, 9-6, 9-7

STANDARDS	LESSON REFERENCES
22. Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections.	4-3, 10-2A, 13-4, 13-5, 13-6A, 13-6, 13-6B, 13-7