Grade 8 Block Schedule Guidance

Unit 8: Pythagorean Theorem and Irrational Numbers

Block	Original Lessons	Plan to Do	If Time Allows	Notes
1	Check Your Readiness Lesson 1 The Areas of Squares and Their Side Lengths	CYR 1.1 1.2 1.3* Lesson 1 Synthesis 1.5	1.4 (optional)	In this lesson, students consider the relationship between the area of a square and its side length.
2	Lesson 2 Side Lengths and Areas Lesson 3 Rational and Irrational Numbers	2.1 2.2 2.3* Lesson 2 Synthesis 3.1 3.3* 3.4* Lesson 3 Synthesis 2.4	3.2	In this block, students move from finding areas of squares with side lengths that are not integers to beginning an exploration of irrational numbers by using square roots.
3	Lesson 4 Square Roots on the Number Line Lesson 5 Reasoning About Square Roots	4.1 4.2* 4.3 5.1 5.2* 5.3 Lesson 4 Synthesis 4.4		These lessons ask students to estimate values for square roots by using geometric and numerical squares.

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4	Lesson 6 Finding Side Lengths of Triangles Lesson 7 A Proof of the Pythagorean Theorem	6.1 6.2* 6.3 7.2* 7.3 Lesson 6 Synthesis 7.5	7.1 7.4 (optional)	In these lessons, students are introduced to the Pythagorean Theorem and then examine a simple proof.
5	Lesson 8 Finding Unknown Side Lengths Lesson 9 The Converse	8.1 8.2 8.3* 9.1 9.2 9.3 Lesson 9 Synthesis 8.4		In this block, students practice using the Pythagorean Theorem to reason about missing side lengths.
6	Lesson 10 Applications of the Pythagorean Theorem Lesson 11 Finding Distances in the Coordinate Plane	10.1 10.2 10.3 11.1 11.2* 11.4 Lesson 11 Synthesis 11.5	11.3 (optional)	In these lessons, students apply the Pythagorean Theorem to find lengths of real-world and mathematical objects.

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7	Lesson 12 Edge Lengths and Volumes Lesson 13 Cube Roots	12.1 12.2 12.3* 13.1 13.2 13.3 Lesson 13 Synthesis 12.4		Students use cubes to expand their understanding of numbers to include cube roots.
8	Lesson 14 Decimal Representations of Rational Numbers Lesson 15 Infinite Decimal Expansions	14.1 14.3 14.4 15.1 15.2* 15.3 Lesson 1 Synthesis 15.4	14.2 (optional)	In these lessons, students look at decimal expansions of rational and irrational numbers.
9	End-of-Unit Assessment Lesson 16 When Is the Same Size Not the Same Size?	EUA 16.1 16.2 16.3		If students can benefit from additional review of the concepts from the unit, consider using Lesson 16 before the assessment and use the time to monitor for ways to improve student understanding. Otherwise, the lesson can come after the assessment as a project in which students play with the ideas from the unit more casually.

Unused cool-downs: 3.5, 5.4, 6.4, 9.4, 10.4, 13.4, 14.5

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