

Special Parallelogram Rectangles And Proof (Big Idea Geometry 7.4)

Lesson 080 | Geometry | Rectangle properties

https://www.youtube.com/watch?v=-Gq_WdjvZ8c

Original practice aligned to the saved video title.

Name: _____ Date: _____ Show your reasoning.

01

A rectangle has diagonal 10 and one side 6. Find its other side, area, and the distance from the diagonal intersection to each vertex.

02

A rectangle has diagonal 30 and one side 18. Find its other side, area, and the distance from the diagonal intersection to each vertex.

03

A rectangle has diagonal 15 and one side 9. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Special Parallelogram Rectangles And Proof (Big Idea Geometry 7.4)

Lesson 080 | Geometry | Rectangle properties

https://www.youtube.com/watch?v=-Gq_WdjuZ8c

Original practice aligned to the saved video title.

Name: _____ Date: _____ Show your reasoning.

04

A rectangle has diagonal 60 and one side 36. Find its other side, area, and the distance from the diagonal intersection to each vertex.

05

A rectangle has diagonal 45 and one side 27. Find its other side, area, and the distance from the diagonal intersection to each vertex.

06

A rectangle has diagonal 20 and one side 12. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Special Parallelogram Rectangles And Proof (Big Idea Geometry 7.4)

Lesson 080 | Geometry | Rectangle properties

https://www.youtube.com/watch?v=-Gq_WdjvZ8c

Original practice aligned to the saved video title.

01

A rectangle has diagonal 10 and one side 6. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(10)^2 - (6)^2} = 8$. Area = 48. Rectangle diagonals are equal and bisect each other, so each half-diagonal = 5.

02

A rectangle has diagonal 30 and one side 18. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(30)^2 - (18)^2} = 24$. Area = 432. Rectangle diagonals are equal and bisect each other, so each half-diagonal = 15.

03

A rectangle has diagonal 15 and one side 9. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(15)^2 - (9)^2} = 12$. Area = 108. Rectangle diagonals are equal and bisect each other, so each half-diagonal = 15/2.

Special Parallelogram Rectangles And Proof (Big Idea Geometry 7.4)

Lesson 080 | Geometry | Rectangle properties

https://www.youtube.com/watch?v=-Gq_WdjvZ8c

Original practice aligned to the saved video title.

04

A rectangle has diagonal 60 and one side 36. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(60)^2 - (36)^2} = 48$. Area = 1728. Rectangle diagonals are equal and bisect each other, so each half-diagonal = 30.

05

A rectangle has diagonal 45 and one side 27. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(45)^2 - (27)^2} = 36$. Area = 972. Rectangle diagonals are equal and bisect each other, so each half-diagonal = $45/2$.

06

A rectangle has diagonal 20 and one side 12. Find its other side, area, and the distance from the diagonal intersection to each vertex.

Other side $\sqrt{(20)^2 - (12)^2} = 16$. Area = 192. Rectangle diagonals are equal and bisect each other, so each half-diagonal = 10.