

8.2 Rectangles and Parallelograms

Chapter 8: Geometry and Measurement

Name: _____

Date: _____

Class/Period: _____

Problem 8.17 A parallelogram has base 12 and perpendicular height 7. Find its area.



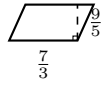
Problem 8.18 A parallelogram has base 8.5 and perpendicular height 4. Find its area.



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Problem 8.19 A parallelogram has base $\frac{7}{3}$ and perpendicular height $\frac{9}{5}$. Find its area.



Problem 8.21 A parallelogram has area 52.5 and perpendicular height 7. Find its base.

Problem 8.22 A parallelogram has base 13, perpendicular height 8, and slanted side 10. Find its area.

Problem 8.20 A parallelogram has area 90 and base 15. Find its perpendicular height.

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Problem 8.23 Explain why two parallelograms with equal bases and heights have equal areas.

Problem 8.26 A parallelogram area is 21 ft^2 and base is 3.5 ft. Find height.

Problem 8.24 Draw a parallelogram whose altitude lies outside it.

Problem 8.27 The base is doubled and height stays fixed. How does area change?

Problem 8.25 A rectangle and parallelogram share base 9 and height 5. Compare areas.

Problem 8.28 The base is tripled and height is divided by 3. How does area change?

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Problem 8.29 A parallelogram has perimeter 46, base 15, and height 8. Find its area and the length of the other side.

Problem 8.31 A rectangle and a parallelogram have equal areas. The rectangle is 12×7 , and the parallelogram has base 14. Find its height.

Problem 8.30 A parallelogram has area 96. Its base is 4 more than its height. Find integer dimensions.

Problem 8.32 A parallelogram is sheared farther to the right while its base and height stay fixed. Explain what happens to area and perimeter.