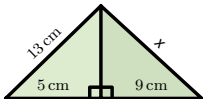


Build Tasks

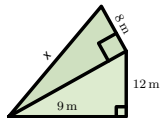


Find x . Show all steps clearly.

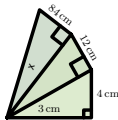
1.



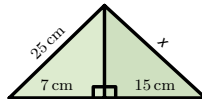
2.



3.



4.

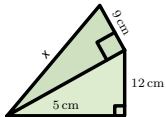


Build Tasks

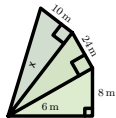


Find x . Label any hidden dimensions.

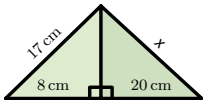
5.



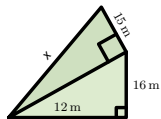
6.



7.



8.

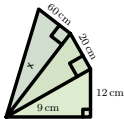


Build Tasks



Find x . Do not round intermediate values.

9.



10. A rectangle is 7 cm by 24 cm. Find the diagonal, then the area and perimeter.

11. A square has diagonal 20 m. Find the side, then the area to 1 decimal place.

12. An isosceles triangle has equal sides 17 cm and base 30 cm. Find the height, then the area.

Build Tasks



Find the intermediate value, then use it for the final step.

13. A ladder is 25 m long and reaches 24 m high. Find the base distance, then the triangle area.

14. A rectangle has perimeter 82 cm and diagonal 29 cm. Find its side lengths.

15. A square has side 9 cm. Find the diagonal exactly and to 1 decimal place, then the perimeter.

16. A triangle has area 40 cm^2 and base 10 cm. If it is isosceles, find the height, then each equal side.

Build Tasks



Solve in two steps: find a hidden length first.

17. A rectangle is 11 cm by 60 cm. Find the diagonal, then decide if a 61 cm brace fits exactly.

18. A right triangle has one short side 20 cm and hypotenuse 29 cm. Find the other short side, then the perimeter.

19. Find the distance from $(1, 1)$ to $(13, 6)$, then give the decimal answer to 1 decimal place.

20. An equilateral triangle has side 10 mm. Find its height, then the area to 1 decimal place.

Build Tasks



Complete two steps: first find the hidden dimension.

21. A regular hexagon has side 8 cm. Find the height of one small triangle, then the total area.

22. An isosceles triangle has sides 6.5 m, 6.5 m, and 7.4 m. Find the height, then the area.

23. A rectangle is 7 cm longer than it is wide and its diagonal is 13 cm. Find the dimensions, then the area.

24. A boat sails 80 km east and then 110 km south. Find how far it is from the start, then round to 1 decimal place.

Build Tasks



Use Pythagoras first, then complete the second step.

25. A football pitch is 105 m by 68 m. Find the diagonal, then compare it with 125 m.

26. A rectangle has width 12 cm and perimeter 58 cm. Find the diagonal.

27. Explain why a multi-step Pythagoras problem often starts by finding a hidden height or diagonal first.