

1. Leave answer is **simplified radical form**. No Calculator needed!

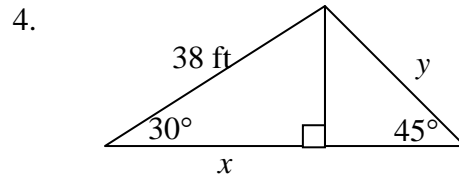
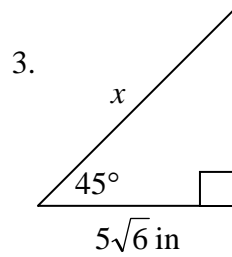
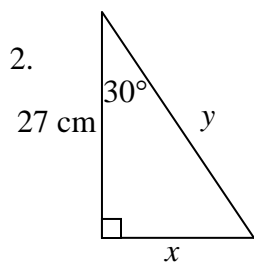
a) $(5\sqrt{2})^2$

b) $2\sqrt{32} - 5\sqrt{8}$

c) $\frac{14}{\sqrt{7}}$

d) $\frac{\sqrt{7}}{\sqrt{3}}$

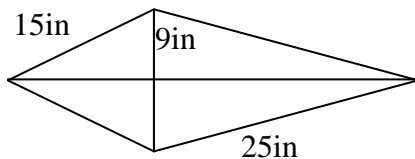
2-4. Find the labeled missing sides of each triangle. **Leave answers in simplified radical form.**
(No Calculator needed!)



5. Find the area of an equilateral triangle with side 28 ft. **Leave answer in simplified radical form.**

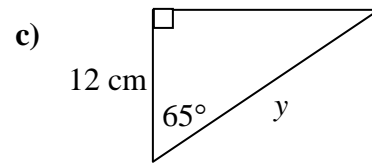
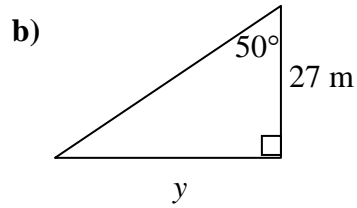
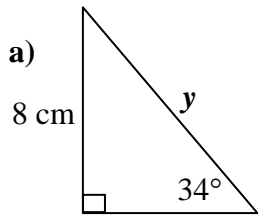
6. Find the perimeter of a square with diagonal 12 cm. **Leave answer in simplified radical form.**

7. Find the area of the kite. Round your final answer to the nearest tenth.

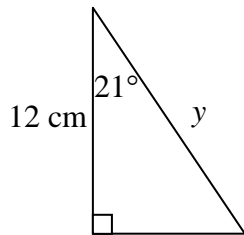


Use Trigonometry on the remaining problems on this side of the problem set.

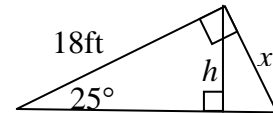
8. Write the equation to find y . **DO NOT SOLVE!!!**



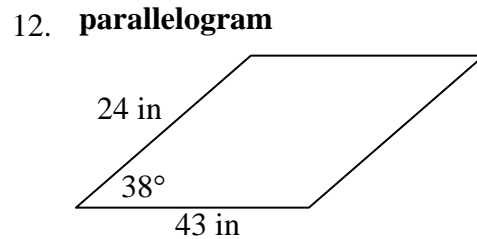
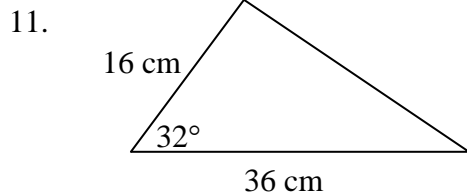
9. Solve for y . Round to the nearest tenth.



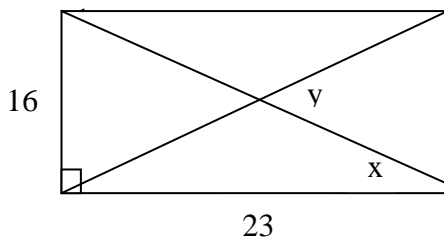
10. Solve for h and x . Round to the nearest tenth.



In 11-12, find the area to the nearest tenth.



13. Find x & y to the nearest degree.



14. A lifeguard sitting in a 25-foot tower looks down to the water and spots a swimmer in trouble. If the angle of depression is 11° , how far is the swimmer from the bottom of the lifeguard tower? Sketch and solve to the **nearest foot**.