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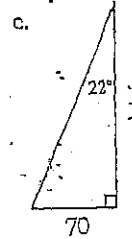
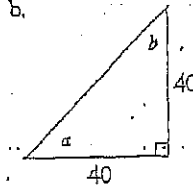
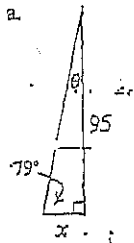
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Geometry Homework 4/3 to 4/12 (Period 2 and 3)
4/4 to 4/11 (Period 6 and 7)

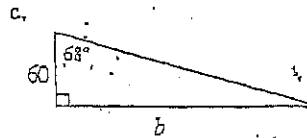
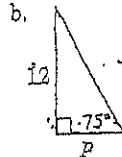
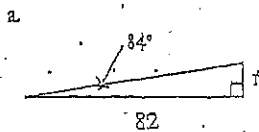
Homework Help:

- Step Up
- SUN School Tutoring in the library
- Afterschool Wednesday and Thursday with Mr. Cha in room 217
- Mr. Cha's website: mrcha.weebly.com
- cpm.org Homework help online.

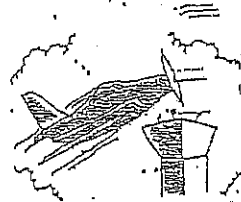
4-16. Use your Trig Table from problem 4-15 to help you find the value of each variable below.



4-36. Find the missing side length for each triangle. Use the tangent button on your calculator to help. * If you do not have a calculator, write answer as $x = 8 \cdot \tan 22$

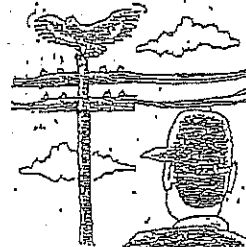


4-27. An airplane takes off and climbs at an angle of 11° . If the plane must fly over a 120-foot tower with at least 50 feet of clearance, what is the minimum distance between the point where the plane leaves the ground and the base of the tower?



- Draw and label a diagram for this situation.
- What is the minimum distance between the point where the plane leaves the ground and the tower? Explain completely.

4-36. Leon is standing 60 feet from a telephone pole. As he looks up, a red-tailed hawk lands on the top of the pole. Leon's angle of sight up to the bird is 22° and his eyes are 5.2 feet above the ground.

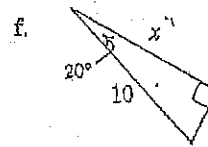
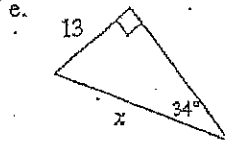
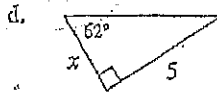
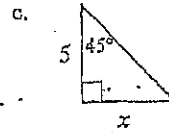
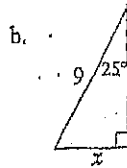
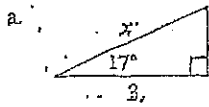
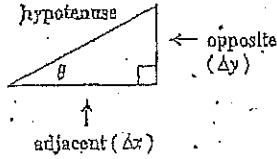


- Draw a detailed picture of this situation. Label with all of the given information.
- How tall is the pole? Show all of your work.

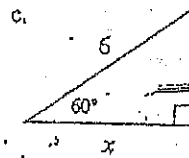
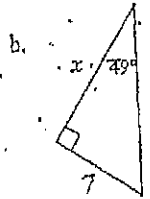
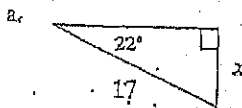
- 4-86. Find x and y in the diagram at right. Show all of the steps leading to your answer.



- 5-5. For each triangle below, decide which side is opposite and which is adjacent to the given acute angle. Then determine which of the three trig ratios will help you find x . Write and solve an equation.



- 5-16. For each triangle below, write an equation relating the reference angle (the given acute angle) with the two side lengths of the right triangle. Then solve your equation for x .



- 5-38. For each triangle below, write a trigonometric equation relating a , b , and θ .

