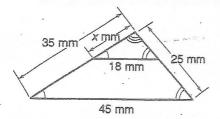
11-6 Practice

Similar Triangles and Indirect Measurement

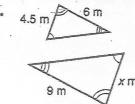
Student Edition Pages 578–583

Write a proportion to find each missing measure x. Then find the value of x.

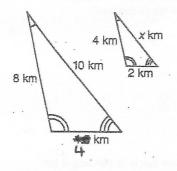
1.



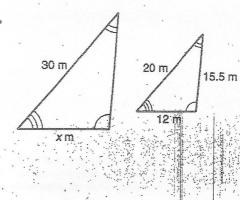
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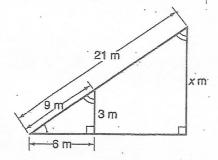
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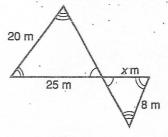
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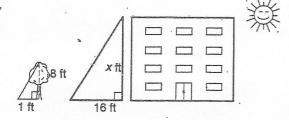
5.



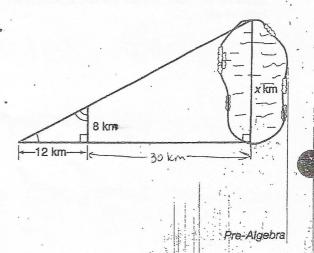
B



7.



8.



Shadow Problems and Indirect Measurement

Use similar triangles to find the missing information.

- A giraffe is 18 feet tall and casts a shadow of 12 feet. Corry casts a shadow of 4 feet. How tall is Corry?
- A 12-foot tall sign cast an 18-foot shadow when the shadow of a boy standing next to it is 6 feet long. How tall is the boy?

- 3. When a tree casts a 20-foot shadow, a man 6 feet tall casts a 3-foot shadow. How tall is the tree?
- 4. Brooke is 5 feet tall. She and her class are walking through a wooded area looking for a tree that is 50 feet tall. If the length of Brooke's shadow is 2 feet, how long will the shadow be of the 50 feet tree?

- 5. Valerie is 30 inches tall and casts a shadow that is 12 inches long. At the same time, her teddy bear casts a shadow that is eight inches long. How tall is the teddy bear?
- 6. A totem pole casts a shadow that is 45 feet long at the same time that a 6-foot-tall man casts a shadow that is 3 feet long. What is the height of the totem pole?

- 7. When a Ferris wheel casts a 20-meter shadow, a man 1.8 meters tall casts a 2.4-meter shadow. How tall is the Ferris wheel?
- 8. A tree that is 6 feet tall casts a shadow that is 4.5 feet long. If a boy standing near the tree has a shadow that is 3 feet long, how tall is the boy?