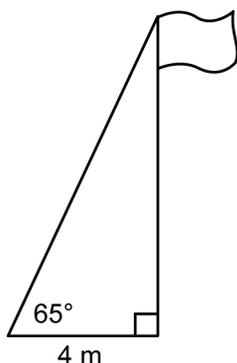


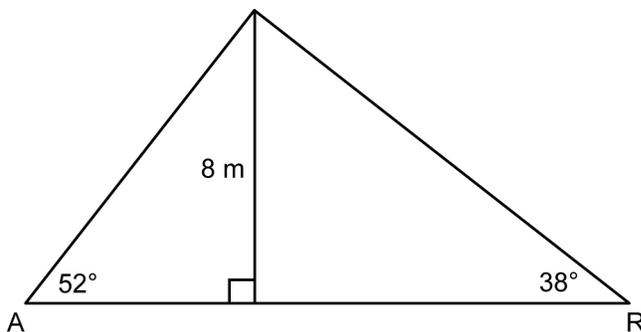
Section 7.5 Practice Master

1. A flagpole is secured with a guy wire, as shown. The guy wire makes an angle of 65° with the ground and is secured 4 m from the bottom of the flagpole.

- a) Find the height of the flagpole, to the nearest tenth of a metre.
b) Find the length of the guy wire, to the nearest tenth of a metre.

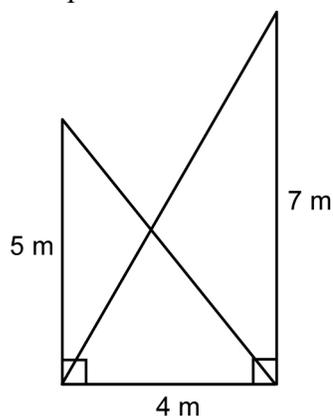


2. Aimee and Russell are facing each other on opposite sides of an 8-m telephone pole. From Aimee's point of view, the top of the telephone pole is at an angle of elevation of 52° . From Russell's point of view, the top of the telephone pole is at an angle of elevation of 38° . How far apart are Aimee and Russell? Round your answer to the nearest tenth of a metre.



3. Zidane and Shemique are looking up at their school from the playing field at the back of the school. From Zidane's point of view, the top of the school is at an angle of elevation of 43° . From Shemique's point of view, directly closer to the school, it is 62° . The school is 27 m high. How far apart are Zidane and Shemique? Round your answer to the nearest tenth of a metre.

4. At the top of a hiking trail, there are two vertical posts. One is 5 m tall, and the other is 7 m tall. The ground between the posts is level, and the bases of the posts are 4 m apart. The posts are connected by two straight wires.



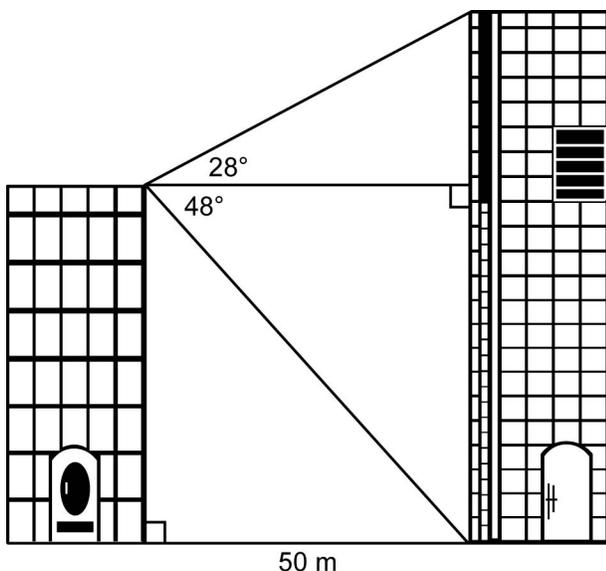
- a) What angle does each wire make with the ground? Round your answer to the nearest degree.
b) What is the length of each wire? Round your answer to the nearest tenth of a metre.

Name: _____

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5. From the top of a building, the angle of elevation of the top of a nearby building is 28° and the angle of depression of the bottom of the nearby building is 48° . The distance between the two buildings is 50 m. What is the height of the taller building? Round your answer to the nearest metre.



6. A square-based pyramid has a height of 182 m and a base length of 280 m. Find the angle, to the nearest degree, that one of the edges of the pyramid makes with the base. Round your answer to the nearest degree.

