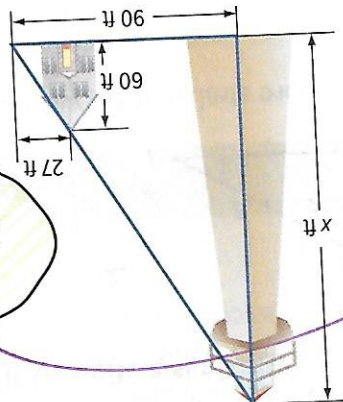


8. MP Find the Error Sara is finding the height of the lighthouse shown in the diagram. Find her mistake and correct it.

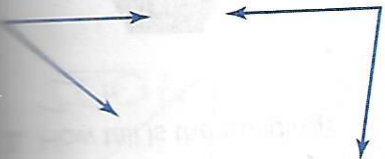


$$\frac{27}{60} = \frac{90}{x}$$

$$27 \cdot 90 = 60x$$

$$x = 40.5$$

9. MP Model with Mathematics On a separate sheet of paper, draw two different triangles so that each one contains both of the angles shown. Then verify that they are similar by determining which transformation will map one onto the other.



10. MP Persevere with Problems You cut a circular hole $\frac{1}{4}$ -inch in diameter in a piece of cardboard. With the cardboard 30 inches from your face, the Moon fits exactly into the hole. The Moon is about 240,000 miles from Earth. Is the Moon's diameter more than 1,500 miles? Justify your reasoning.

11. MP Identify Structure What measures must be known in order to calculate the height of tall objects using shadow reckoning?

12. MP Reason Inductively Milla wants to estimate the height of a statue in a local park. Milla's height and both shadow lengths are shown in the diagram. Is an estimate of 15 feet reasonable for the statue's height? Explain your reasoning.

