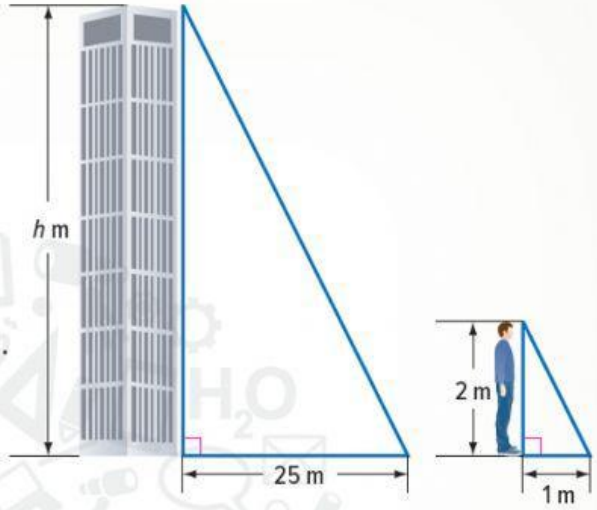
Power Up! Test Practice

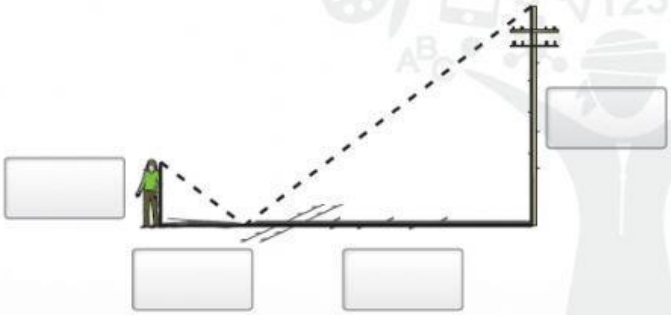
19. Omar is 2 meters tall and casts a shadow 1 meter long. At the same time, a nearby tower casts a shadow that is 25 meters long.



Write a proportion Omar can use to find the height of the tower. $\frac{2\text{ m}}{1\text{ m}} = \frac{h\text{ m}}{25\text{ m}}$

Using the proportion, the tower is ____ meters tall.

20. Eissa is 1.6 meters tall and is using similar triangles and a mirror to find the height of a telephone pole. The horizontal distance between Eissa and the telephone pole is 9 meters. He places the mirror on the ground 2.4 meters from himself so that he can see the top of the pole in the mirror's reflection as shown in the figure below.



1.6 m	2.4 m	4.0 m	4.5 m
6.6 m	9 m	h m	

Select values to label the diagram with the correct dimensions.

What is the height of the telephone pole? ____