24. (a) Let x be the distance from the plane to point A. Then $\dfrac{x}{AB} = \dfrac{\sin 48^\circ}{\sin(180^\circ - 32^\circ - 48^\circ)}$

$= \dfrac{\sin 48^\circ}{\sin 100^\circ} \quad \Leftrightarrow \quad x = 5 \cdot \dfrac{\sin 48^\circ}{\sin 100^\circ} \approx 3.77$ mi.

(b) Let h be the height of the plane. Then $\sin 32^\circ = \dfrac{h}{x} \quad \Rightarrow \quad h = (3.77) \sin 32^\circ \approx 2.00$ mi.

26. Assuming that the tree is growing perpendicular to flat ground and not the hillside, then the angle subtended by the top of the tree and the sun's rays is $\angle A = 180^\circ - 90^\circ - 52^\circ = 38^\circ$. Thus the height of the tree is $h = \dfrac{215 \cdot \sin 30^\circ}{\sin 38^\circ} \approx 175$ ft.