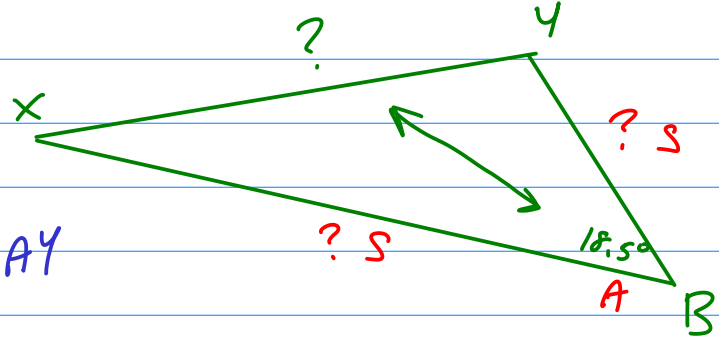
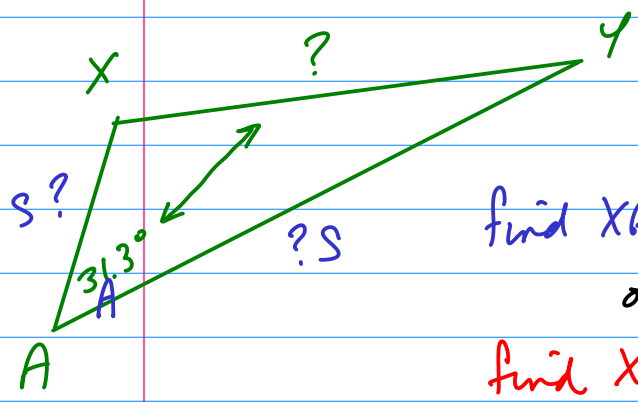
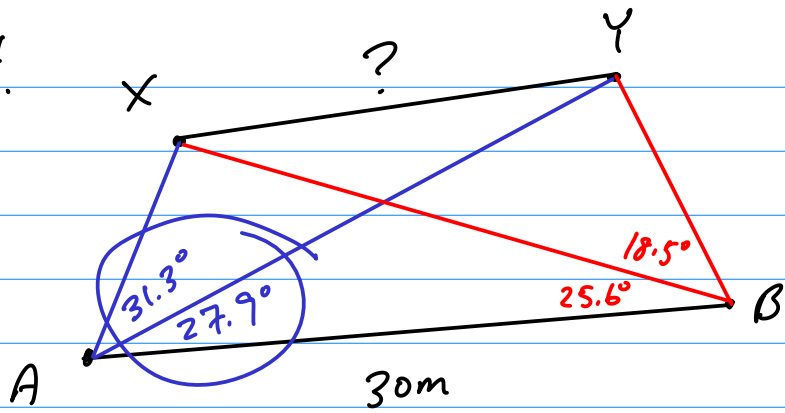
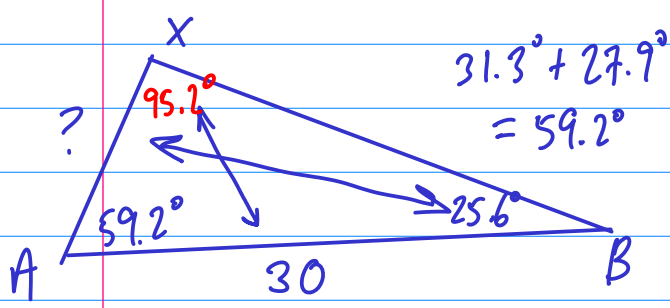


p. 294 # 14.



find XA + AY
OR
find XB + BY

use $\triangle XAB$ to find XA



$$\frac{XA}{\sin 25.6^\circ} = \frac{30}{\sin 95.2^\circ}$$

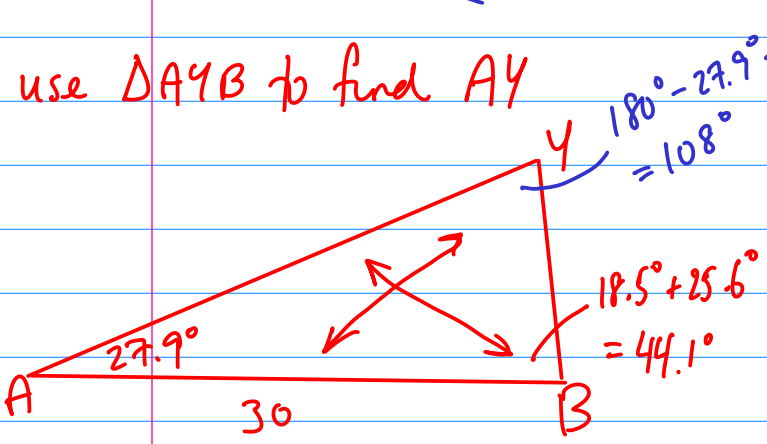
$$XA = \frac{30 \sin 25.6^\circ}{\sin 95.2^\circ}$$

$$XA \approx 13.0161$$

$$\angle X + 59.2^\circ + 25.6^\circ = 180^\circ$$

$$\angle X = 95.2^\circ$$

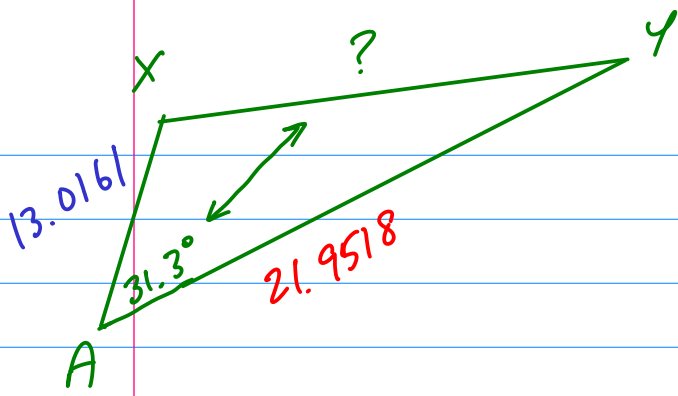
use $\triangle AYB$ to find AY



$$\frac{AY}{\sin 44.1^\circ} = \frac{30}{\sin 108^\circ}$$

$$AY = \frac{30 \sin 44.1^\circ}{\sin 108^\circ}$$

$$AY \approx 21.9518$$



$$XY^2 = (13.0161)^2 + (21.9518)^2 - 2(13.0161)(21.9518) \cos 31.3^\circ$$

$$XY^2 = 163.0168$$

$$XY = \underline{12.7678}$$

∴ the distance between X and Y
is 12.8 m.
13m