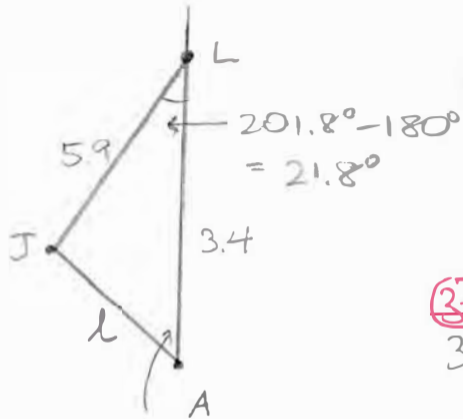


[2]



SHOULD BE
OBTUSE ACCORDING
TO CALCULATIONS

$$\begin{aligned} \textcircled{3\pm} l^2 &= 5.9^2 + 3.4^2 - 2(5.9)(3.4)\cos 21.8^\circ \\ &= 9.1191 \\ l &= \underline{3.0198} \textcircled{\pm} \end{aligned}$$

$$\begin{aligned} \textcircled{3\pm} 5.9^2 &= 3.0198^2 + 3.4^2 - 2(3.0198)(3.4)\cos A \\ 34.81 &= 20.6792 - 20.5346\cos A \end{aligned}$$

$$\cos A = \underline{-0.6881} \textcircled{1}$$

$$A = \underline{133.4799} \textcircled{\pm}$$

$$\text{BEARING} = \underline{360^\circ - 133.4799^\circ = 226.5^\circ} \textcircled{2}$$

$$[3] \text{ AREA} = \frac{1}{2} ab \sin B = \frac{1}{2} (3.5)(6.2) \sin 94.6^\circ = 10.8$$

$$[4] [a] t \leq v \sin T \rightarrow t \leq 4.5 \sin 39.6^\circ \rightarrow t \leq \underline{2.9} \text{ (E)}$$

$$[6] \quad v \sin T < t < v \rightarrow \underline{2.9 < t < 4.5} \quad \textcircled{2}$$

[5] [a] 5.6 \geq 3.1 + 2.4 = 5.5 (LONGEST SIDE LONGER THAN SUM OF
2 SHORTER SIDES) \rightarrow DNE

[6] SSA: N IS OBTUSE, BUT $C > n$ (SIDE OPPOSITE LARGEST

②

ANGLE IS NOT LONGEST)

→ DNE ①

[c] $R > P$ BUT $r < p$ (SHORTER SIDE OPPOSITE LARGER ANGLE)

②

→ DNE ①

[d] SSA: $d \sin B = 7.9 \sin 40.3^\circ = 5.1096 < 6.1 < 7.9$
 $d \sin B < b < d \rightarrow 2 \Delta$'s

$$\frac{\sin D}{7.9} = \frac{\sin 40.3^\circ}{6.1} \rightarrow \sin D = \frac{7.9 \sin 40.3^\circ}{6.1} = 0.8376 \text{ (1)}$$

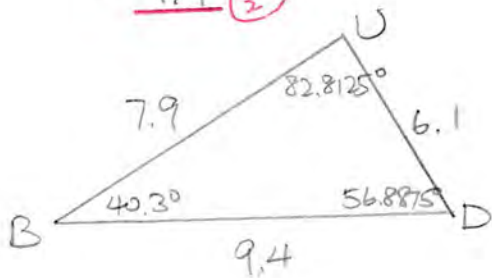
$$D = 56.8875^\circ \text{ or } 180^\circ - 56.8875^\circ = 123.1125^\circ \text{ (1)}$$

IF $D = 56.8875^\circ$

$$U = 180^\circ - 40.3^\circ - 56.8875^\circ = 82.8125^\circ \text{ (1)}$$

$$\frac{U}{\sin 82.8125^\circ} = \frac{6.1}{\sin 40.3^\circ} \text{ (2)}$$

$$U = \frac{6.1 \sin 82.8125^\circ}{\sin 40.3^\circ} = 9.4 \text{ (1)}$$



IF $D = 123.1125^\circ$

$$U = 180^\circ - 40.3^\circ - 123.1125^\circ = 16.5875^\circ \text{ (1)}$$

$$\frac{U}{\sin 16.5875^\circ} = \frac{6.1}{\sin 40.3^\circ} \text{ (2)}$$

$$U = \frac{6.1 \sin 16.5875^\circ}{\sin 40.3^\circ} = 2.7 \text{ (1)}$$

