## 9E Problem Solving

1. The diagram shows the locations of four mobile phone masts in a field. $B C=75 \mathrm{~m}, C D=$ 80 m , angle $B C D=55^{\circ}$ and angle $A D C=140^{\circ}$
The masts must be at least 70 m apart so that they do not interfere with each other. Given that $A$ is the minimum distance from $D$, find the distance $A B$.

