## Name:

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## Law of Cosines

1) Solve each of the following triangles $A B C$ :
2) $a=4.5, b=7.30, \mathrm{c}=9.98$
3) $a=320, c=475, B=35^{\circ} 20^{\prime}$
4) $A=30^{\circ}, a=3.0$, and $c=5.0$
5) $A=30^{\circ}, a=3.0$, and $c=6.0$
6) $A=46^{\circ}, b=32 \mathrm{~cm}$, and $c=53 \mathrm{~cm}$
7) Find the length of $A D$.

8) A plane is to fly from Sharjah to Abu Dhabi, a distance of 200km. The plane flies 20 km on a course that is $11^{\circ}$ off its correct heading before the pilot discovers the error. By what angle $\theta$ must he now change course in order to head for Abu Dhabi
