Name:

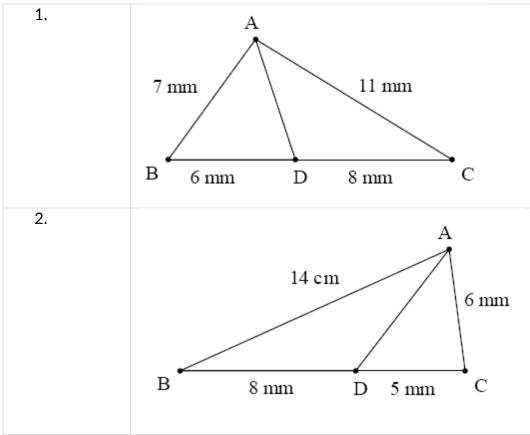
Law of Cosines

1) Solve each of the following triangles ABC:

3)
$$A = 30^{\circ}$$
, $a = 3.0$, and $c = 5.0$

4)
$$A = 30^{\circ}$$
, $a = 3.0$, and $c = 6.0$

- 5) $A = 46^{\circ}$, b = 32 cm, and c = 53 cm
- 2) Find the length of AD.



3) 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° off its correct heading before the pilot discovers the error. By what angle θ must he now change course in order to head for Abu Dhabi