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## Secants, Tangents, and Angle Measures

1. TELESCOPES Vanessa looked through her telescope at a mountainous landscape. The figure shows what she saw. Based on the view, approximately what angle does the side of the mountain that runs from $A$ to $B$ make with the horizontal?

2. RADAR Two airplanes were tracked on radar. They followed the paths shown in the figure.


What is the acute angle between their flight paths?
3. EASELS Francisco is a painter. He places a circular canvas on his A-frame easel and carefully centers it. The apex of the easel is $30^{\circ}$ and the measure of arc $B C$ is $22^{\circ}$. What is the measure of arc $A B$ ?

4. Solve for $x$.

5. Solve for $x$.

6. Solve for $x$.


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38 x+2
$$

7. Find the measure of arc BD.

