Name:

**Practice Test**

A

**Chapter** **3** **–** **Trigonometry**

1. Solve the following RIGHT Triangles.

18cm

1. $ $

B

$42°$

E

37m

D

30m

F

1. Find length AB

A

7cm

12cm

D

C

120 ◦

B

1. Solve each triangle using the Law of Sines. There may be 0, 1, or 2 triangles.
2. ∠A=$130°$ a=16cm b=19cm
3. ∠A=$40°$ a=16cm b=18cm
4. ∠A=$80° $ a=19cm b=20cm
5. ∠A=$45°$ a=13cm b=11cm
6. Solve each triangle using the Law of cosines.
7. a=5cm b=6.5cm ∠F=$65°$
8. a=5.2mm b=4.0mm c=4.5mm
9. Two trees (of different heights) are 100 m apart. From the point on the ground halfway between the trees, the angles of elevation to the top of the trees are $21°$ and$ 39°$. Determine the distance between the tops of the two trees.
10. After a hurricane, the small tree in my neighbor’s yard was leaning. To keep it from falling, we nailed a 6-foot strap into the ground, 4 feet from the base of the tree. We attached the strap to the tree 3.5 feet above the ground. What angle was the tree leaning at?