Chapter 7: Right Triangles
Lesson 7-4: Trigonometry
Classwork

name _____
date _____
period ____

Find the value of each ratio to the nearest ten thousandth.
ex. sin 35° = .5736

1. sin 40° = _____   2. cos 36° = _____   3. tan 15° = _____

4. sin 82° = _____   5. cos 78° = _____   6. tan 63° = _____

Find the measure of each angle to the nearest degree.
ex. sin A = .7586   49°

7. sin A = .8365 _____   8. cos B = .3494 _____   9. tan C = .8383 _____

10. sin D = .1334 _____   11. cos E = .0634 _____   12. tan F = 4.4533 _____

Find the trigonometric ratio as a fraction and as a decimal
rounded to the nearest ten thousandth.

	fraction	decimal
13. sin A =		

	fraction	decimal
14. cos F =		

	fraction	decimal
15. tan B =		

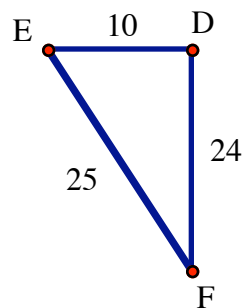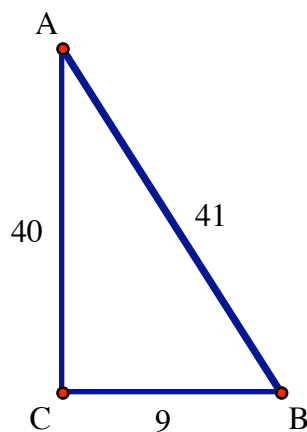|	fraction	decimal
16. sin E =		

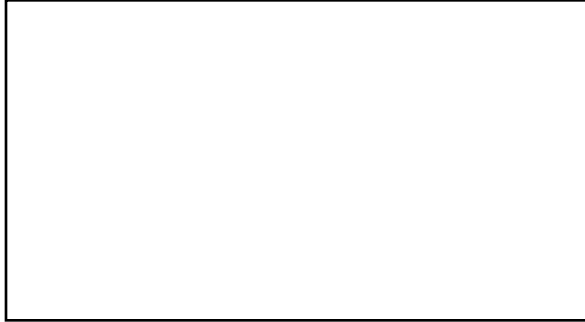|	fraction	decimal
17. cos A =		

Solve the following. Round the measures of segments to the nearest tenth and the measures of angles to the nearest degree.

18. A 30 foot ladder leans against a building making an angle with the ground of 42°. What is the height the ladder reaches up the building, to the nearest tenth of a foot?

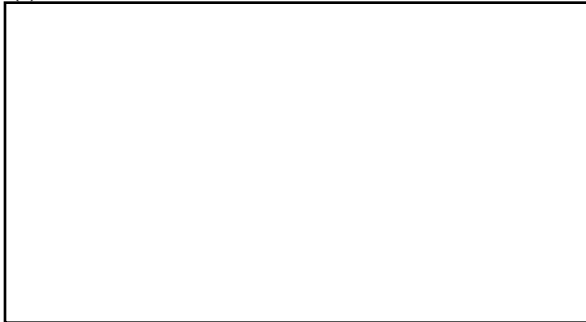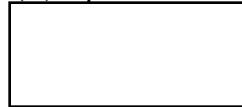(I) sketch   (II) equation   (III) answer _____

19. A boat in the water is 300 feet from the base of a lighthouse. The distance from the boat to the top of the light house is 700 feet. Find the angle of elevation from the boat to the top of the lighthouse, to the nearest degree.

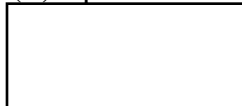(I) sketch   (II) equation   (III) answer _____

20. An airplane, 50 meters above ground, is attempting to land. The planes angle of depression is 80°. Find the ground length the plane is from landing, to the nearest tenth.

(I) sketch   (II) equation   (III) answer _____