Chapter 9 Review Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Secondary Math 3 Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Solve for the third side length. Then write all six trig functions for the following triangles.



1. 2.

Label the sides of the triangles with a, b, c. Then label them with opposite, hypotenuse, adjacent using <A.

3. A

C

B

Solve for x.

4. 5. 6.

x

480

370

x

150

x

7

25

13

Evaluate the following using a calculator. Round to 2 decimal places.

7.) sin80= 8) cos37= 9) tan356=

Fill in the blank with the correct ratio (opposite, hypotenuse, adjacent)

10. sin=\_\_\_\_\_\_\_\_\_\_\_\_ 11. cos=\_\_\_\_\_\_\_\_\_\_ 12. tan=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. csc=\_\_\_\_\_\_\_\_\_\_\_\_\_ 14. sec=\_\_\_\_\_\_\_\_\_\_\_ 15. cot=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the measure of the angle x to the nearest degree.

16.) 17.) 18.)

7

13

x

19

14

x

15

x

 22

19. During its approach to Earth, the space shuttle’s glide angle changes. When the space shuttle is 8 miles from the runway, its glide angle is about 18 degrees. Find the shuttle’s altitude at this point in its descent. Round your answer to the nearest tenth.

altitude

distance to runway

runway

glide angle

20. The angle of elevation from the base of a waterslide to the top is about 12. The slide extends horizontally (along the ground) about 52.2 meters. How tall is the slide?

Match the lengths of the missing sides of the special right triangles, given one side

450



5

600

21. 22.



450

23. 24.

600

25

25. Solve the following triangle.

10

17

*b*

C

B

A

  

26. Solve the following triangle.

R

Q

  

13

460

P