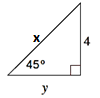
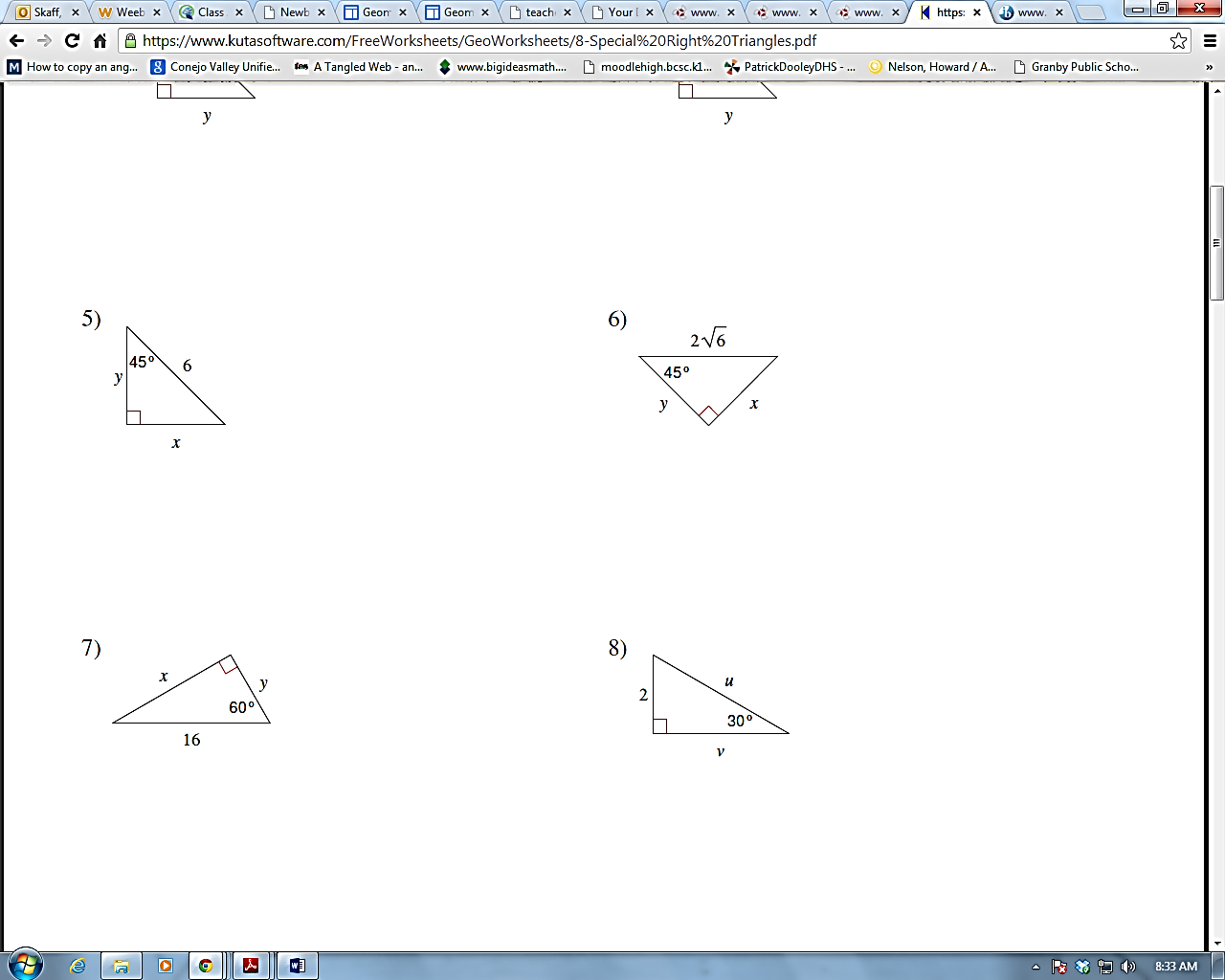
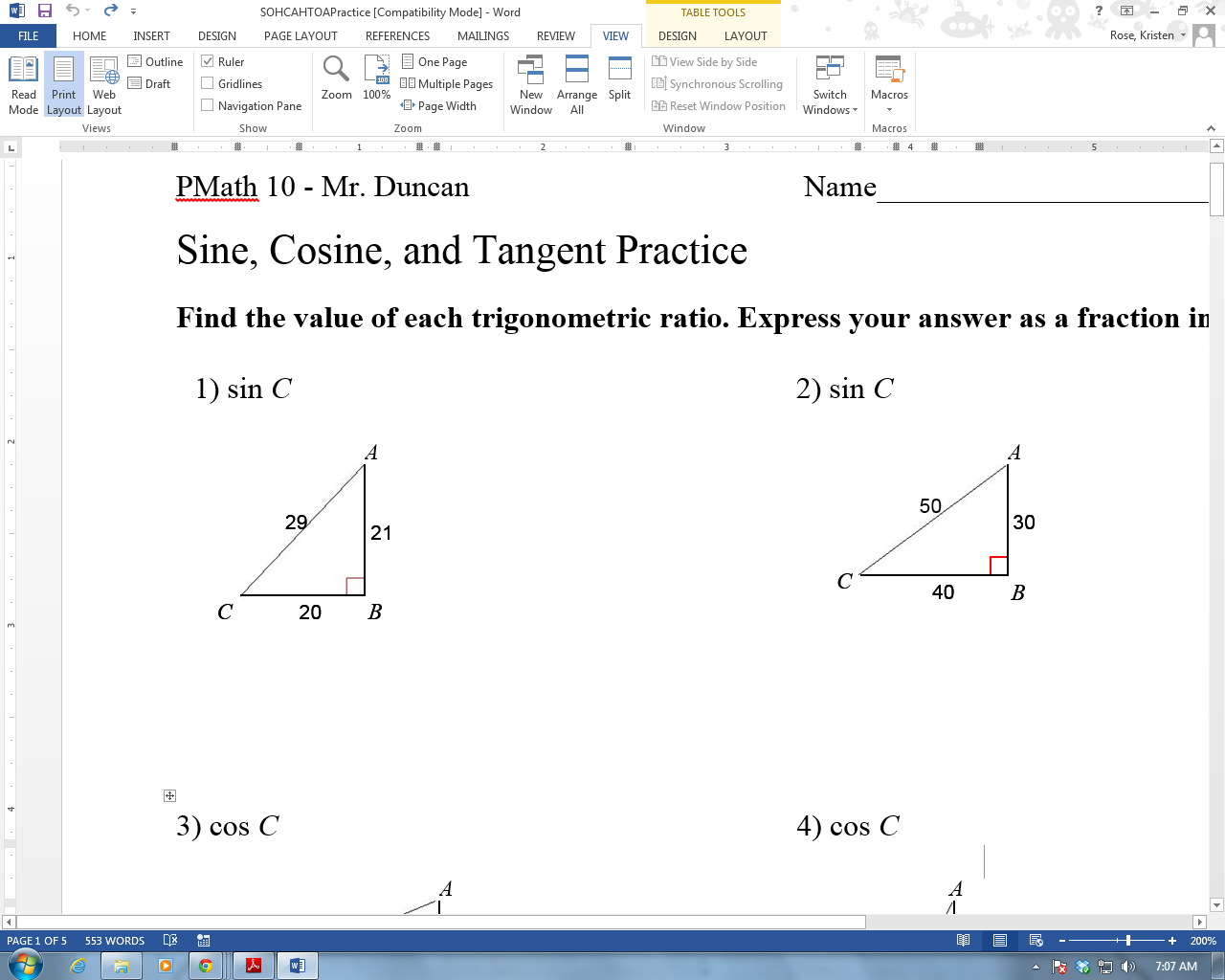
Sine, Cosine, and Tangent Practice + Special Right Triangles

**Find the value of each trigonometric ratio. Find the missing sides using special right triangles.**

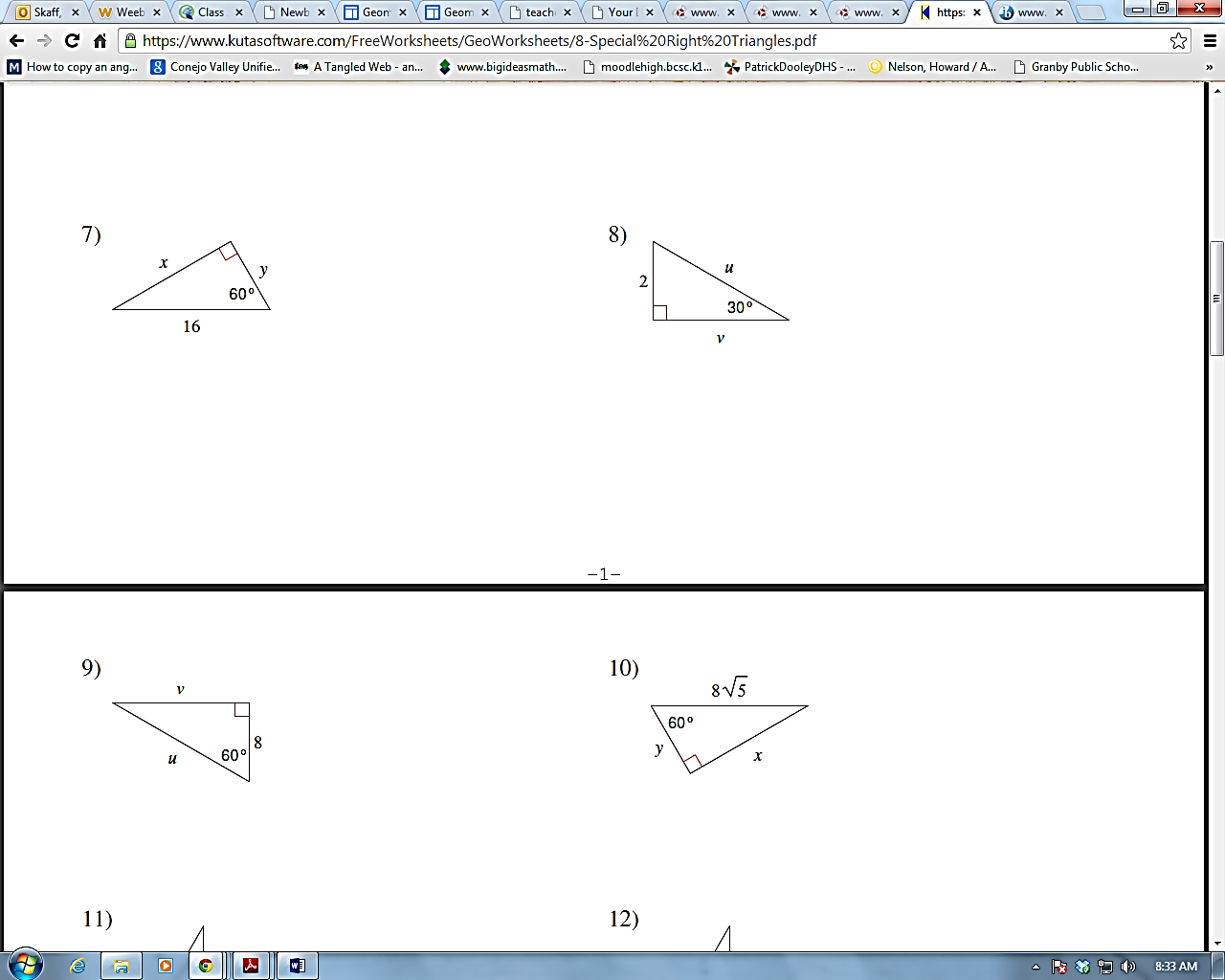
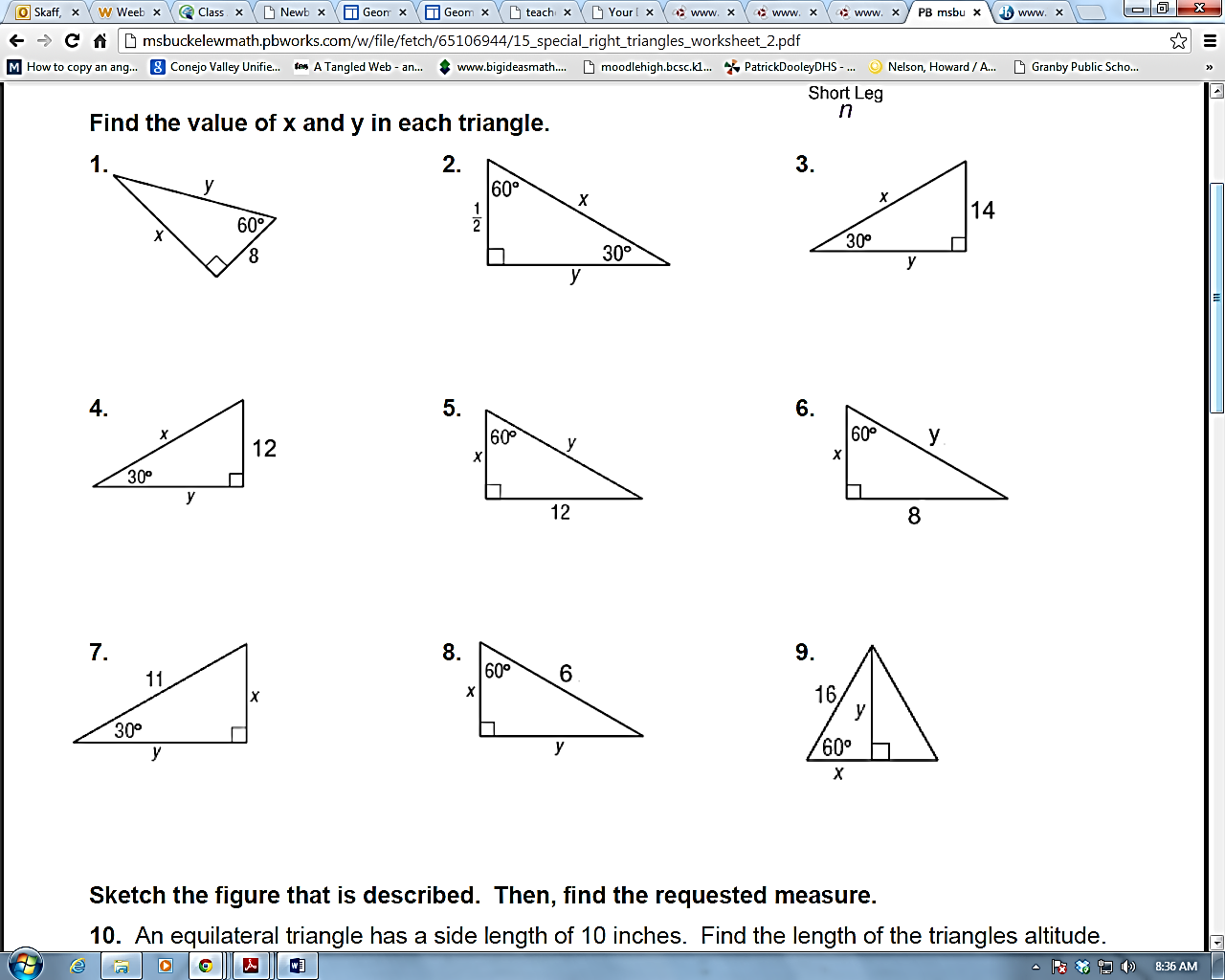
******Express your answer as a fraction in lowest terms.**

5)

4)



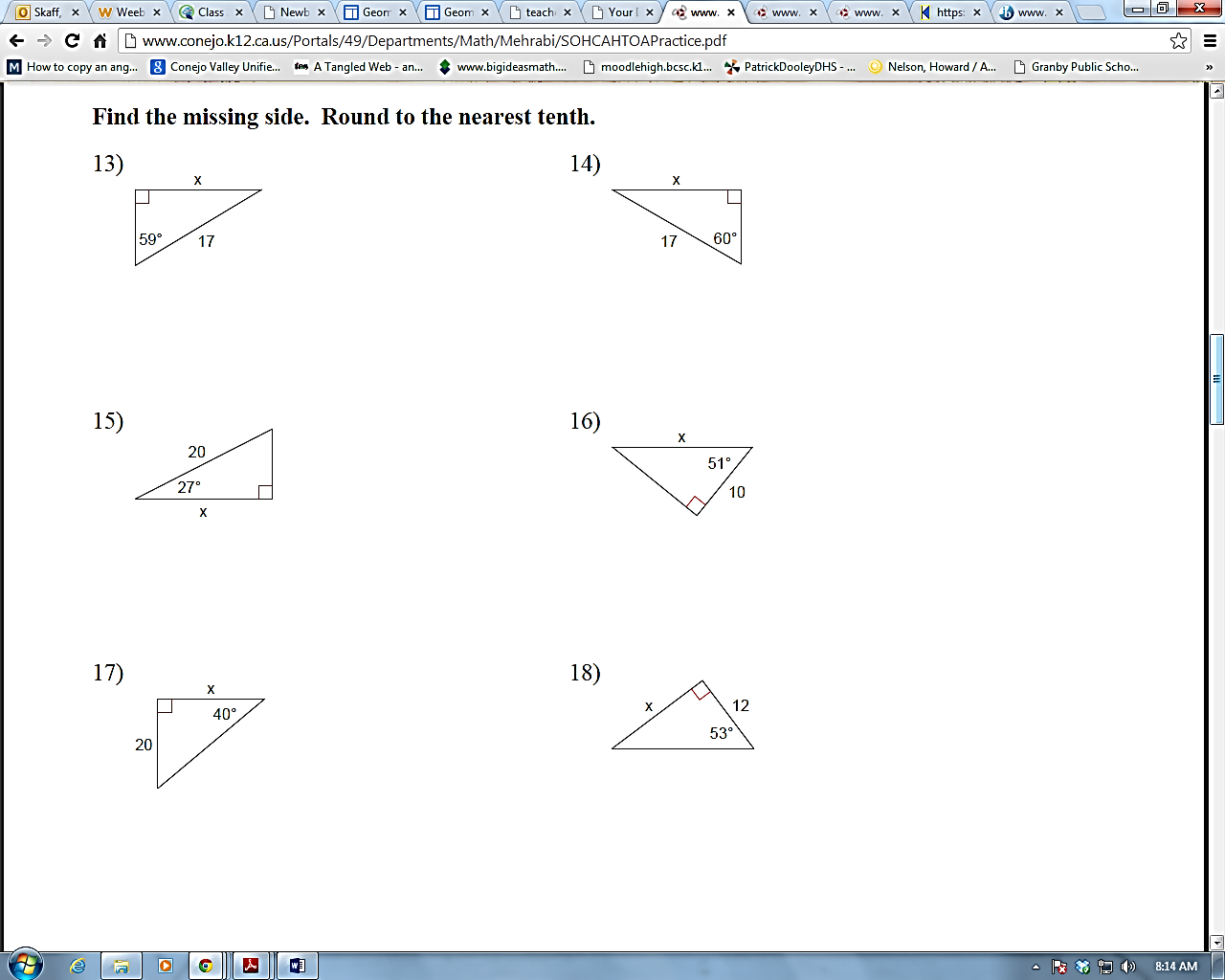
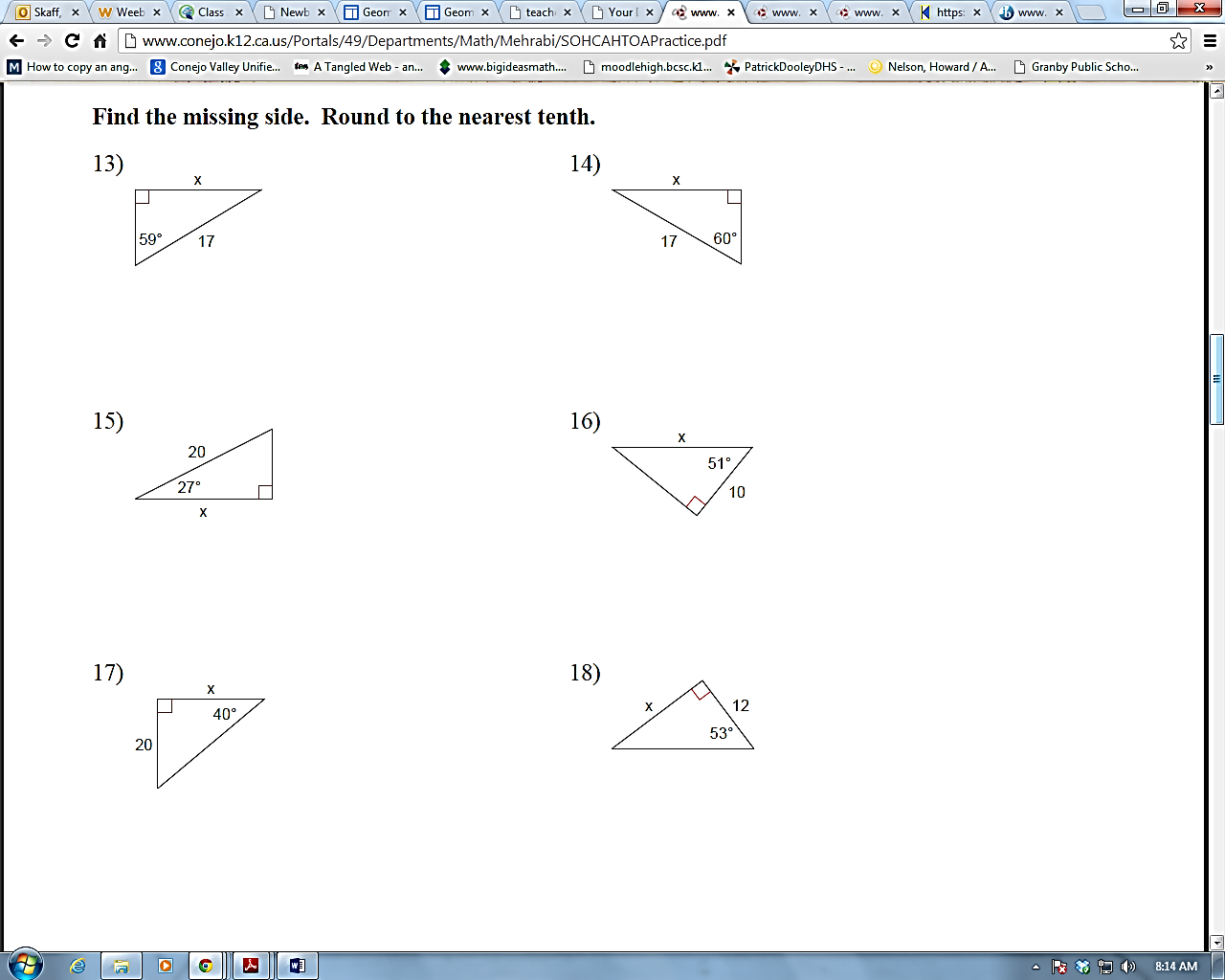
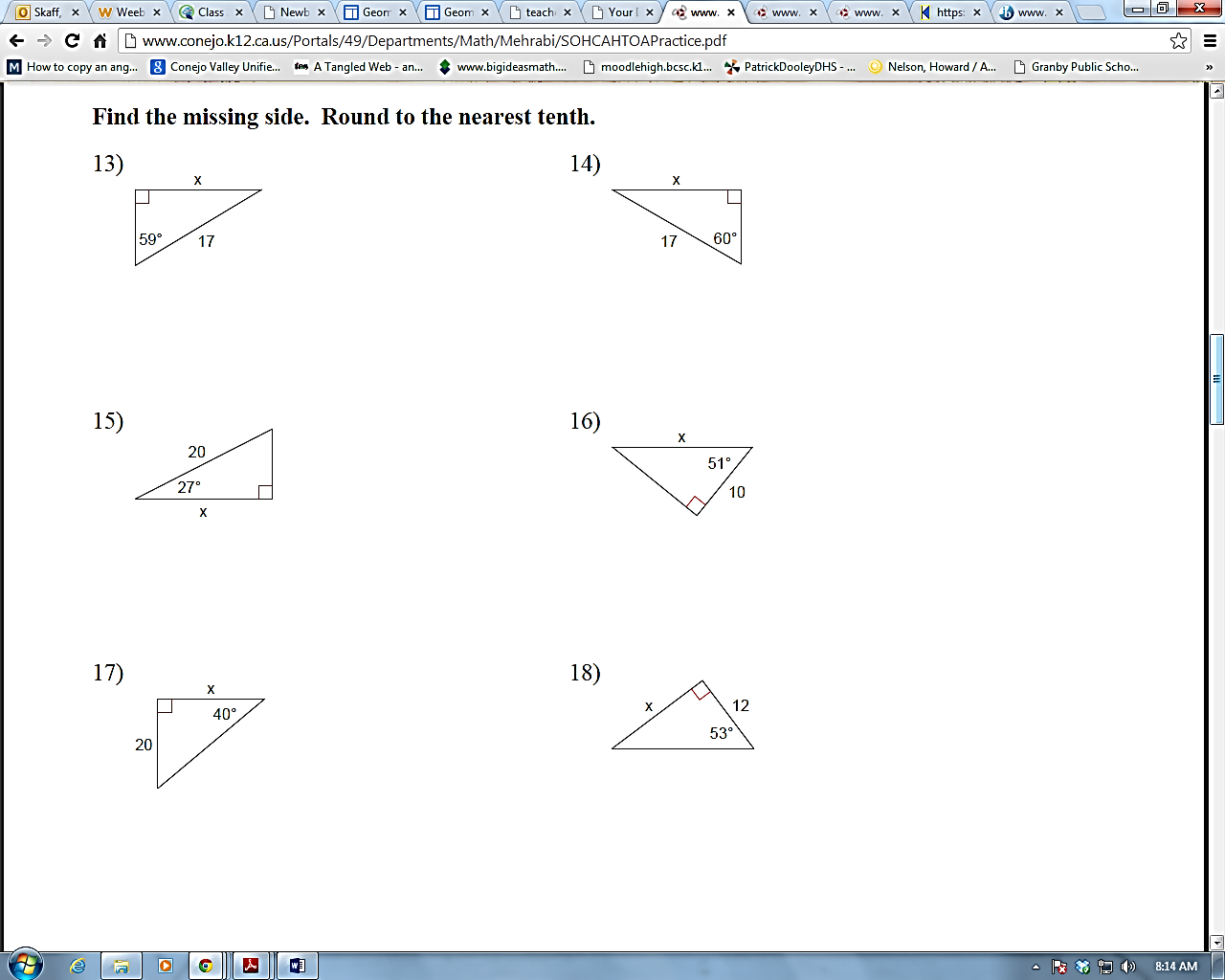
1. Sin C
2. Cos A
3. Tan A



7)

6)

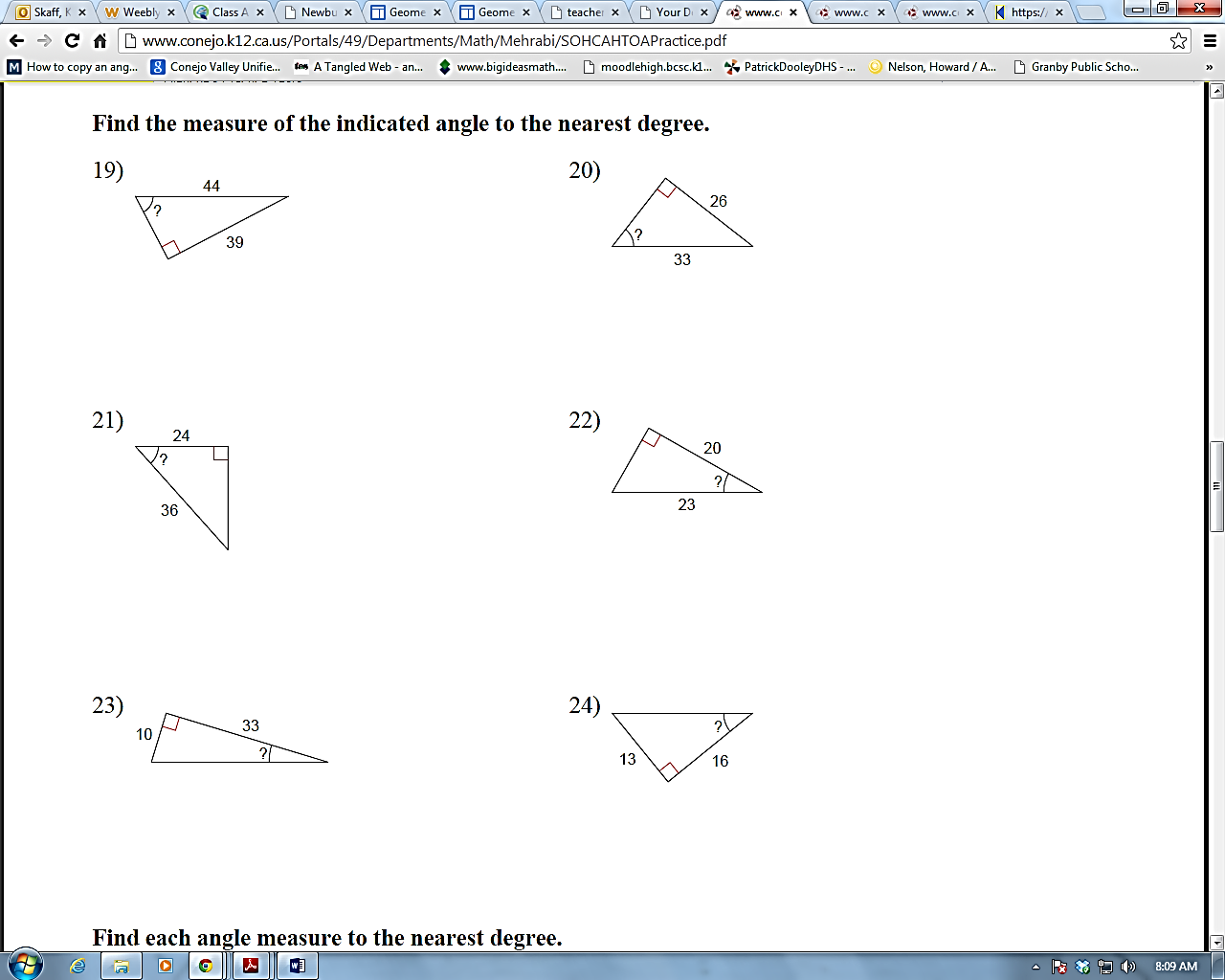
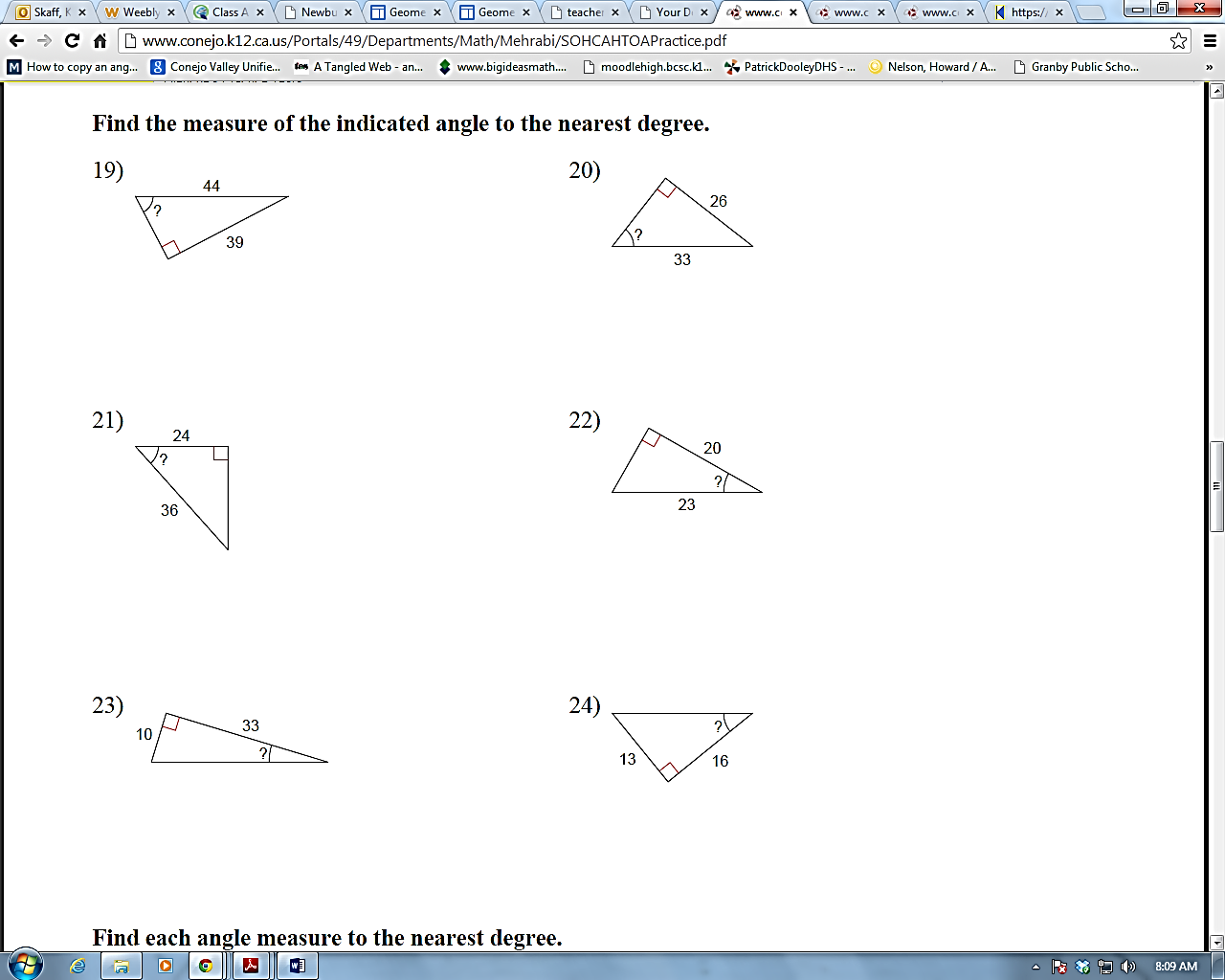
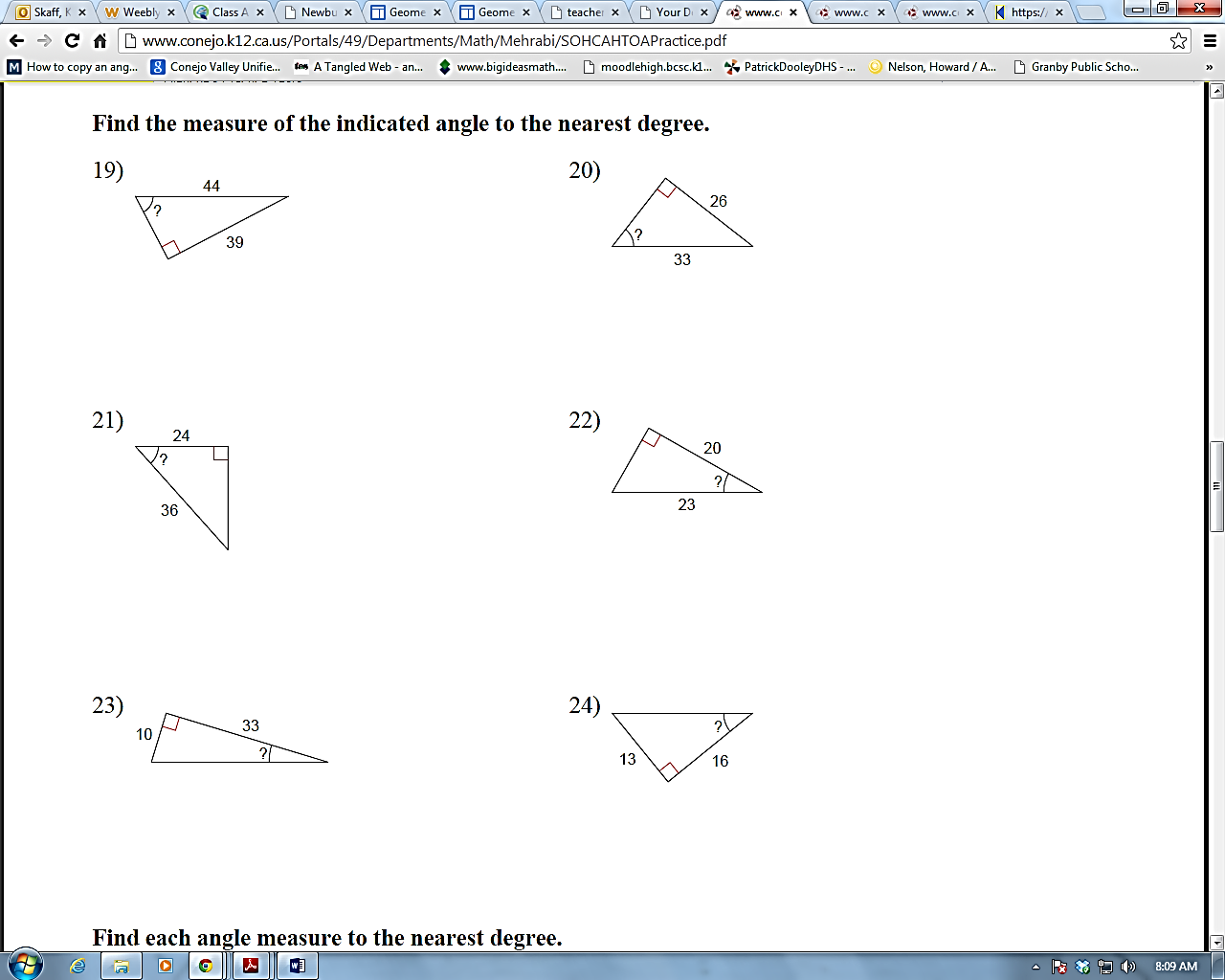
**Find the indicated side/ angle. Round to the nearest tenth.**

10)

8)

9)

13)

12)

11)

**Solve the triangles (find ALL missing sides and angles)**

15)

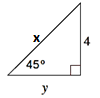
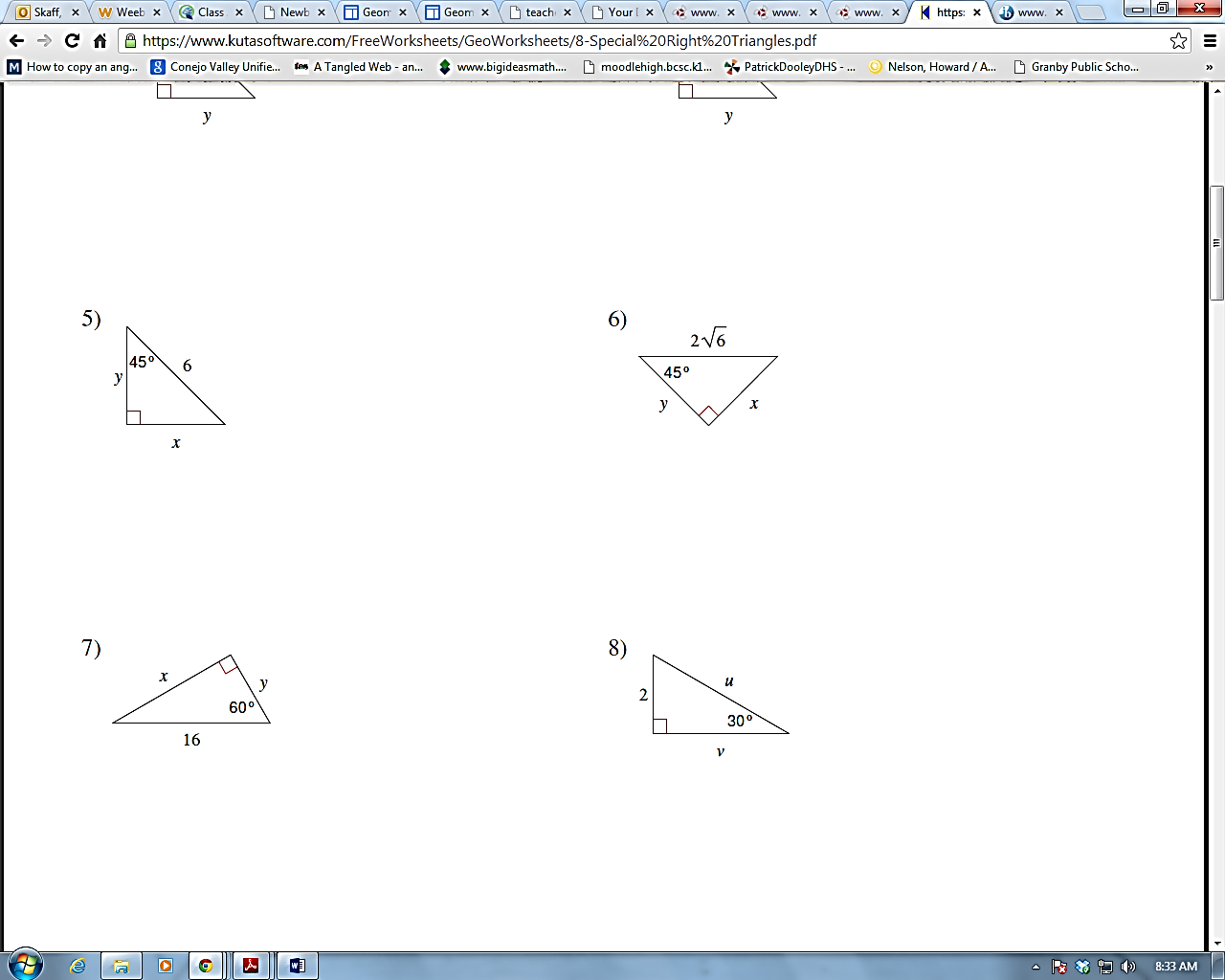
14)

**Solve the following word problems. For each question, draw a diagram to help you.**

1. An airplane is flying at an altitude of 6000 m over the ocean directly toward a runway on the ground. At a certain time, the angle of depression to the funway from the airplane is 14°. How much farther (to the nearest kilometer) does the airplane have to fly before it lands on the runway?
2. From a horizontal distance of 80.0 m, the angle of elevation to the top of a flagpole is 18°. Calculate the height of the flagpole to the nearest tenth of a metre.
3. A 9.0 m ladder rests against the side of a wall. The bottom of the ladder is 1.5 m from the base of the wall. Determine the measure of the angle between the ladder and the ground, to the nearest degree.
4. A wheelchair ramp is 4.2 m long. It rises 0.7 m. What is its angle of inclination to the nearest degree?
5. From a plane flying due east at 265 m above sea level, the angles of depression of two ships sailing due east measure 35° and 25 °. How far apart are the ships?
6. A person flying a kite has released 176 m of string. The string makes an angle of 27° with the ground. How high is the kite? How far away is the kite horizontally? Answer to the nearest metre.

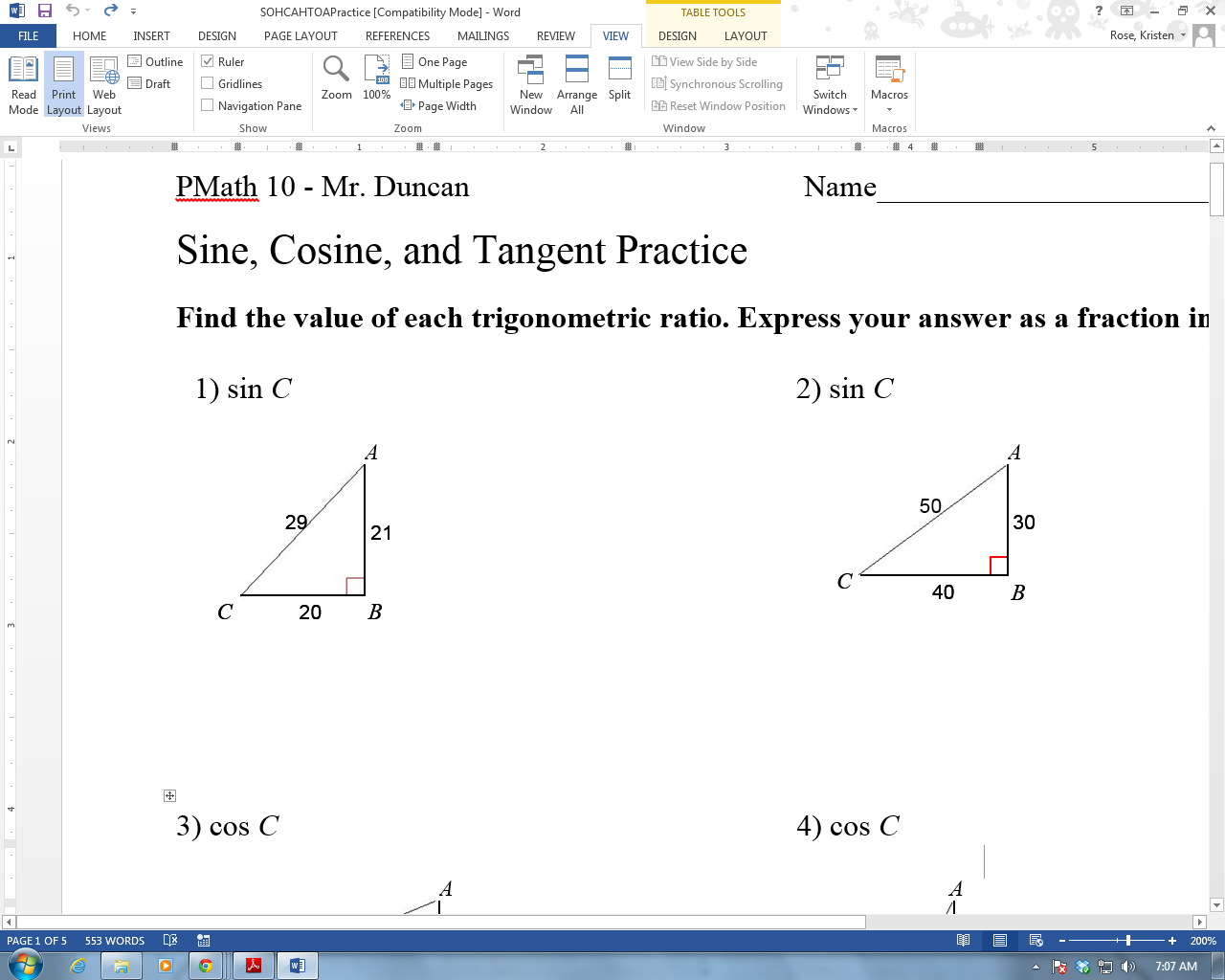
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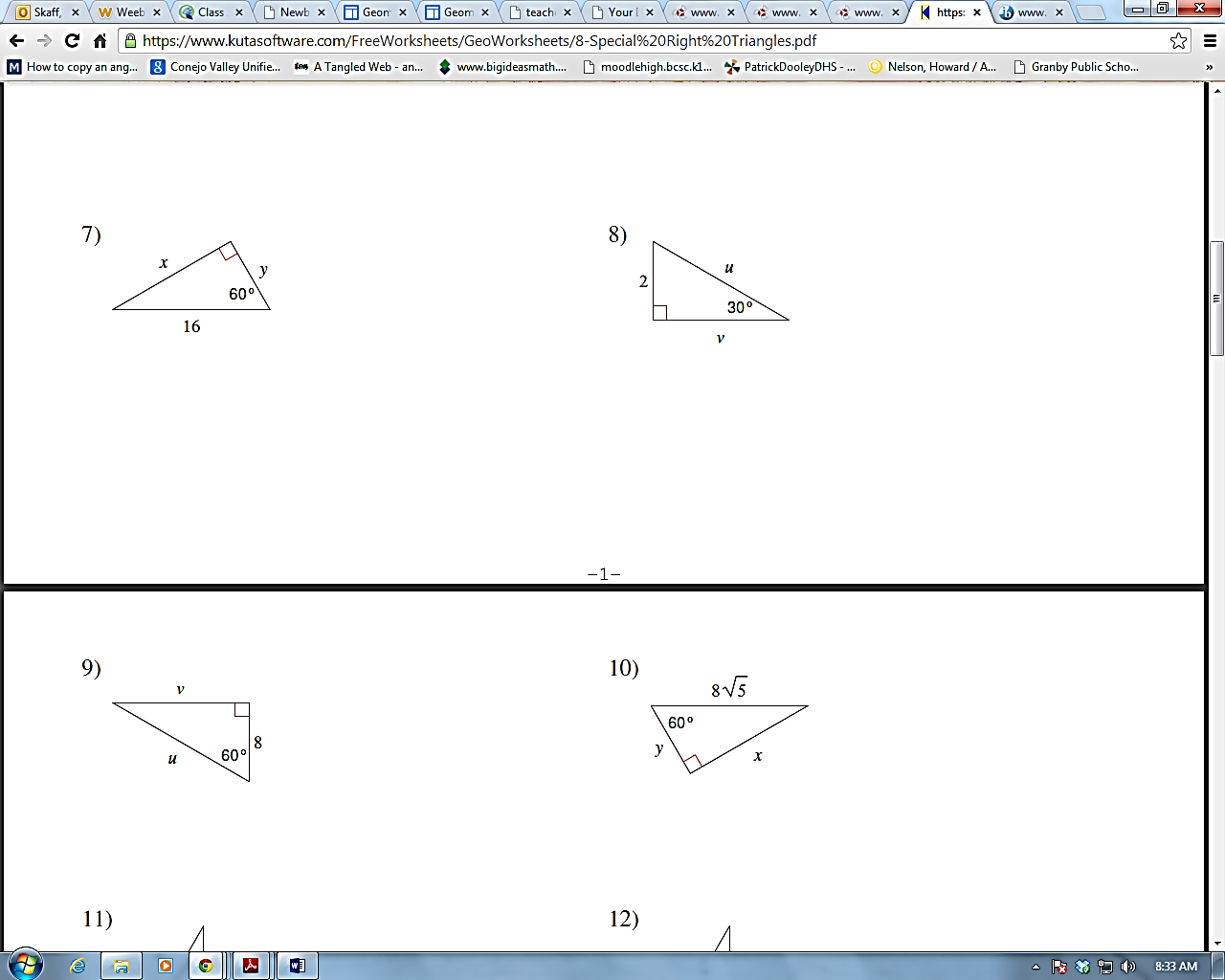
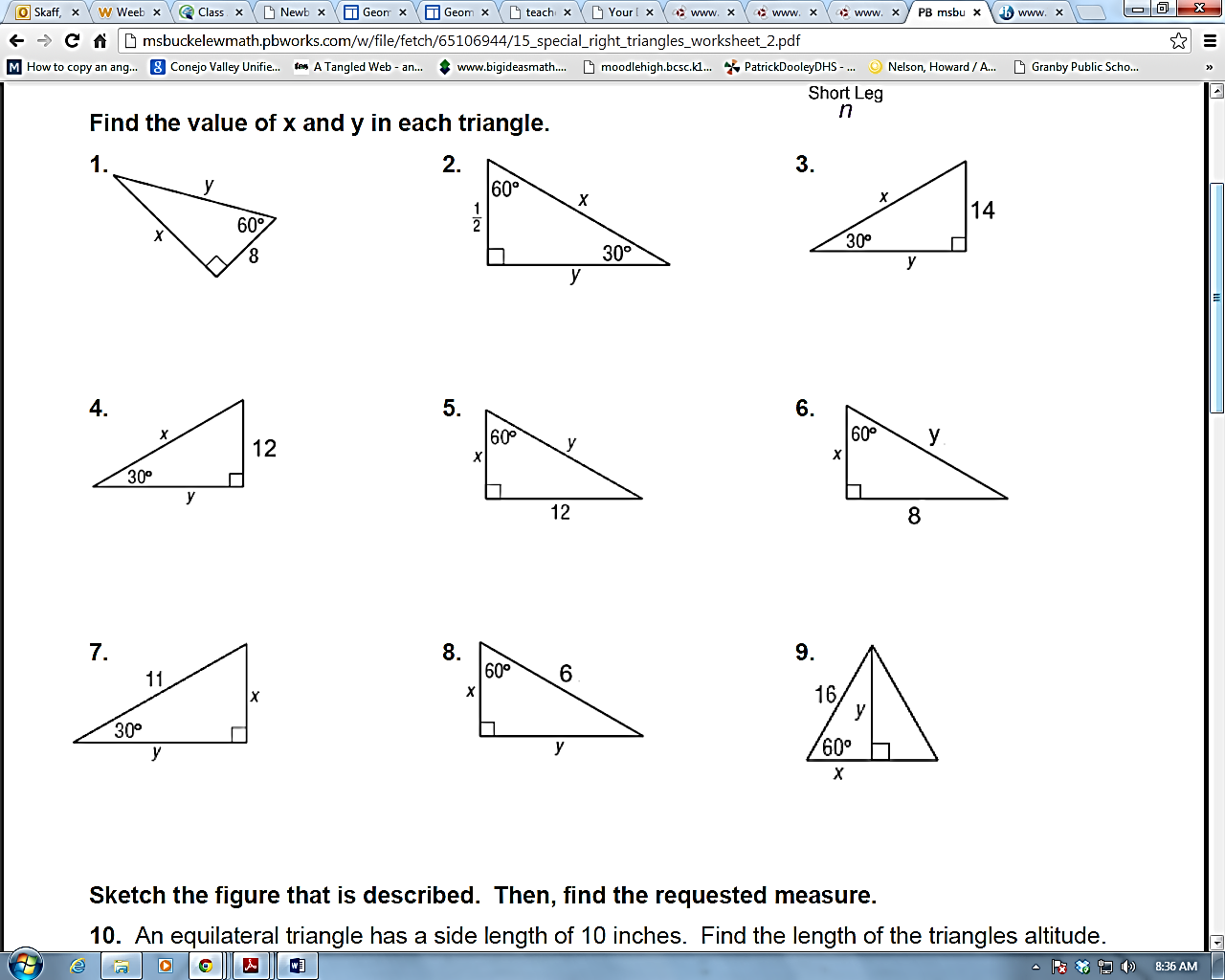
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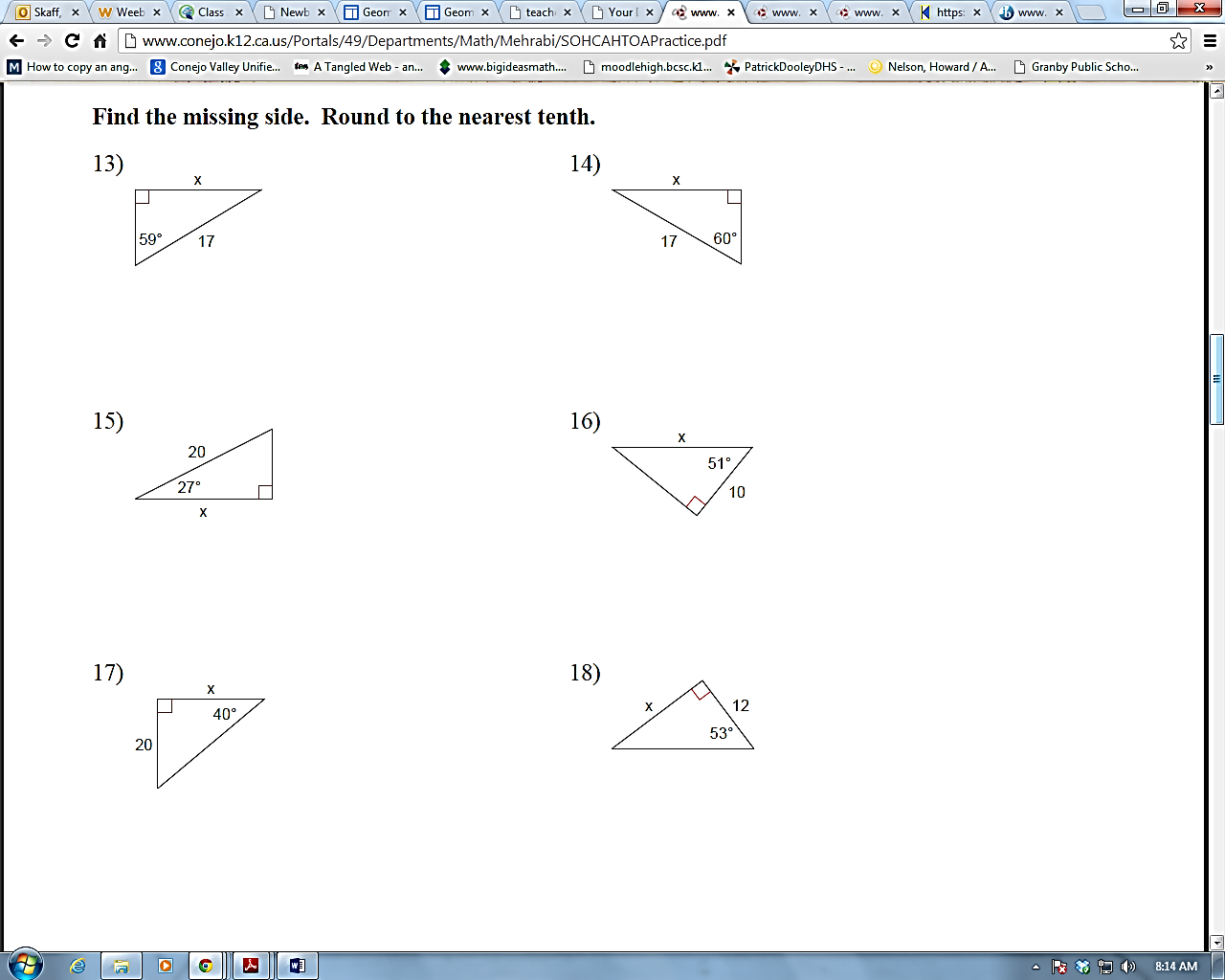
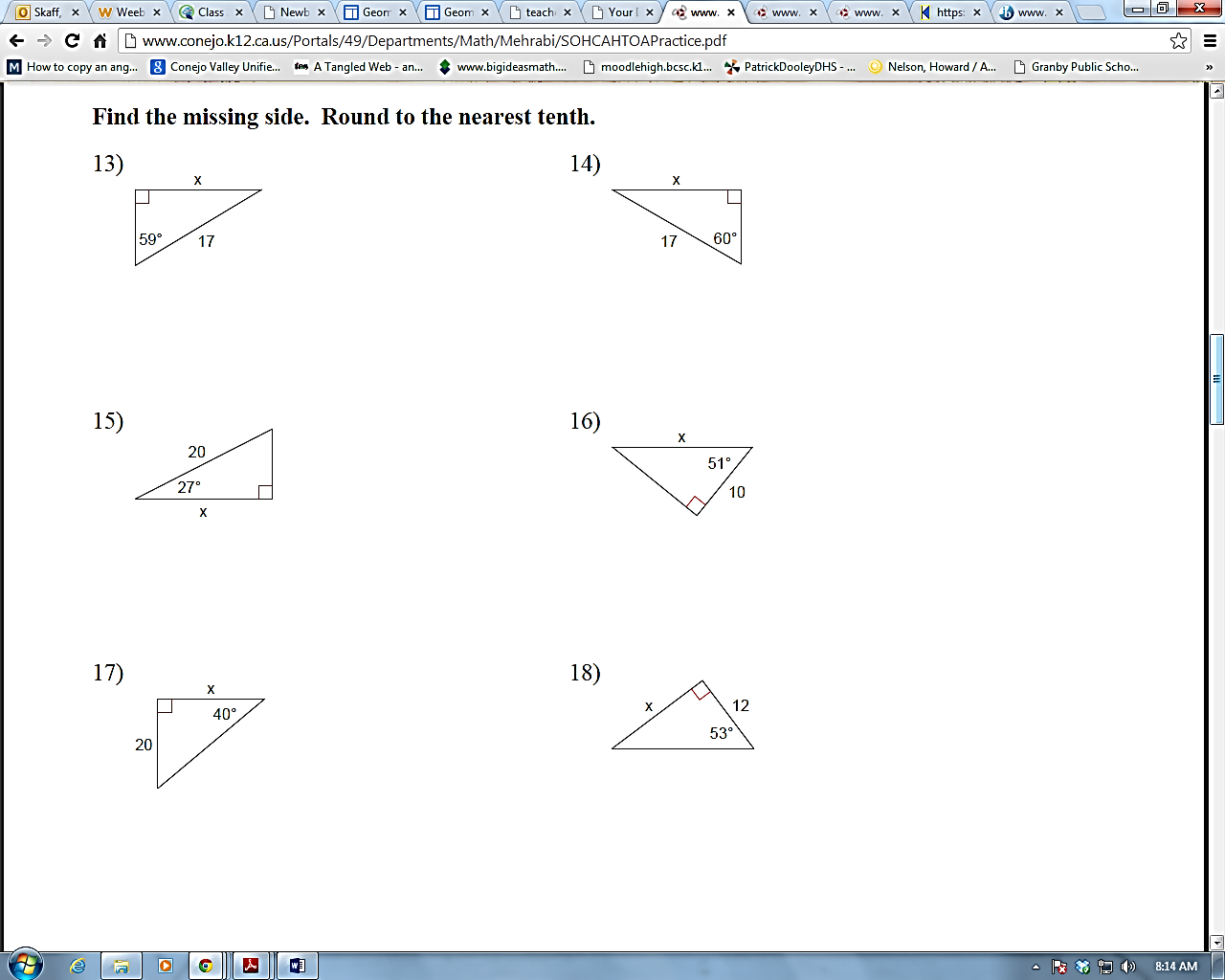
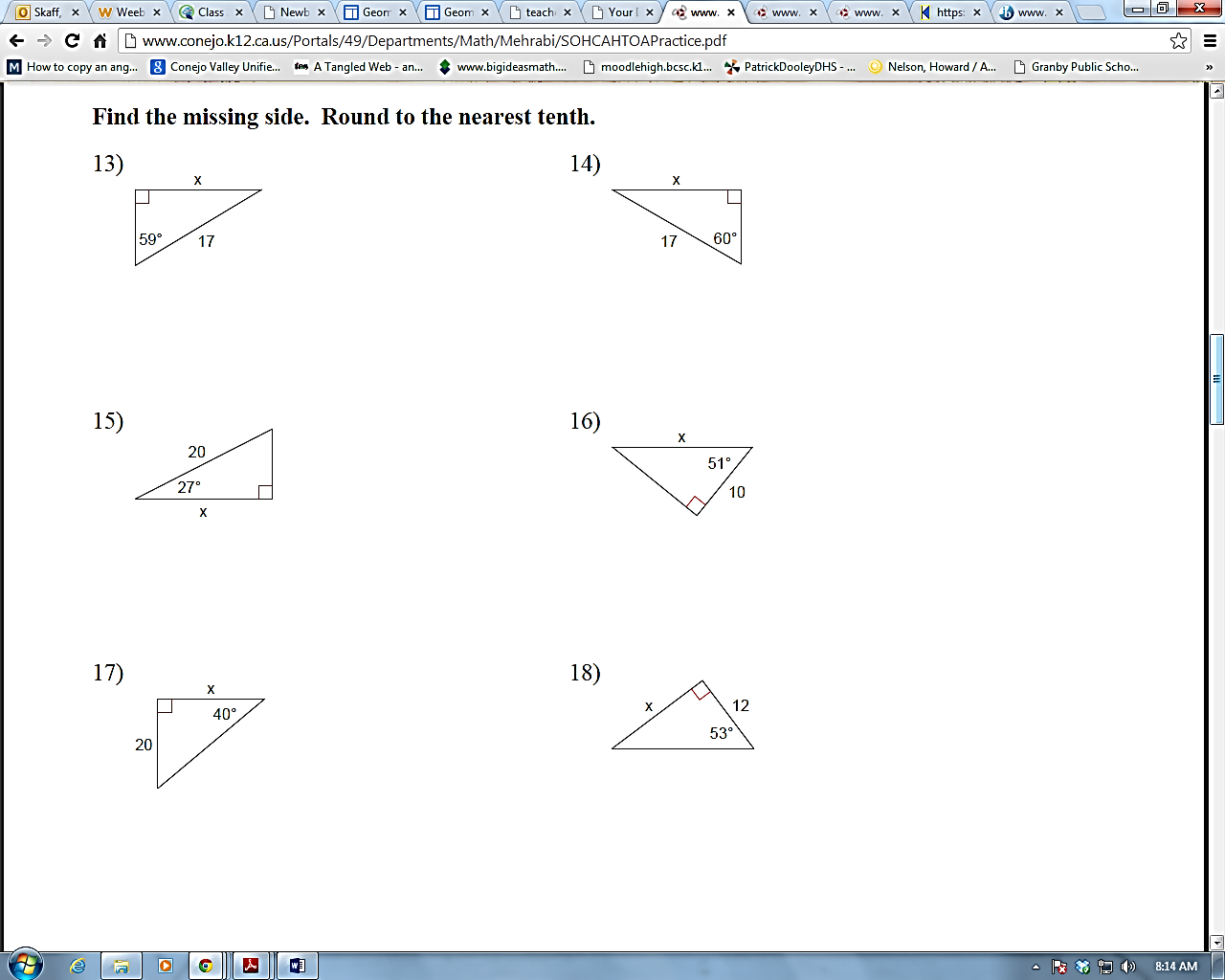
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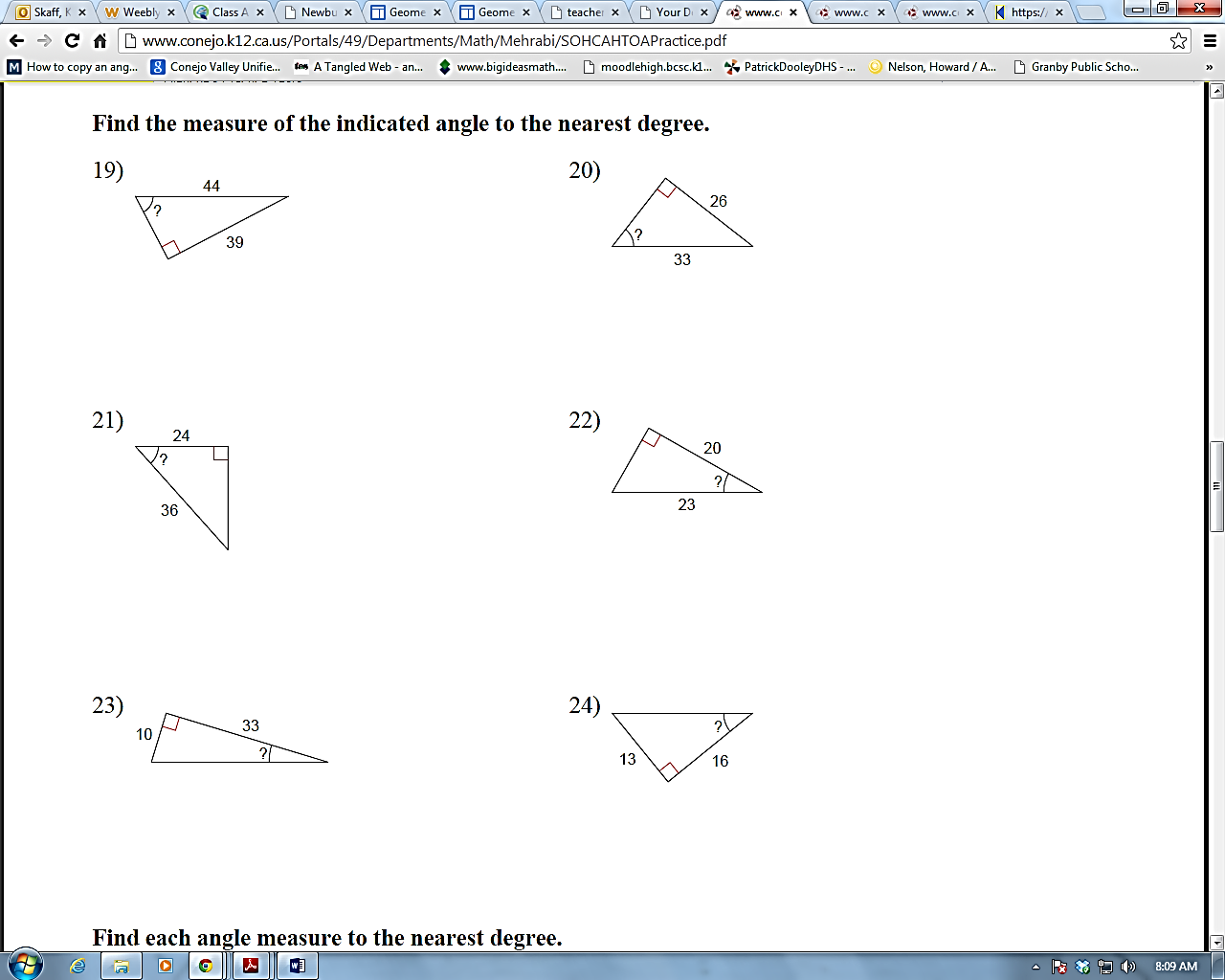
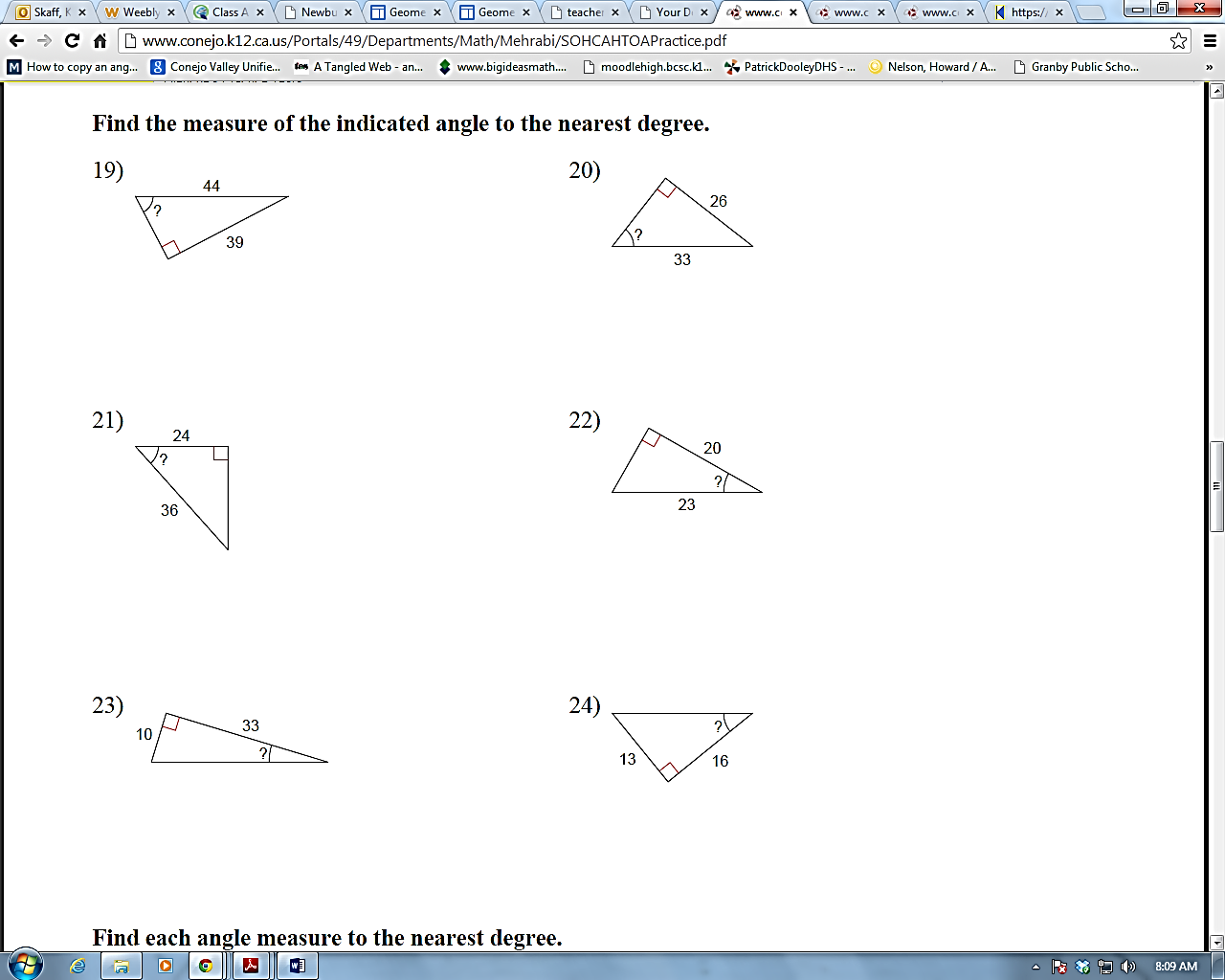
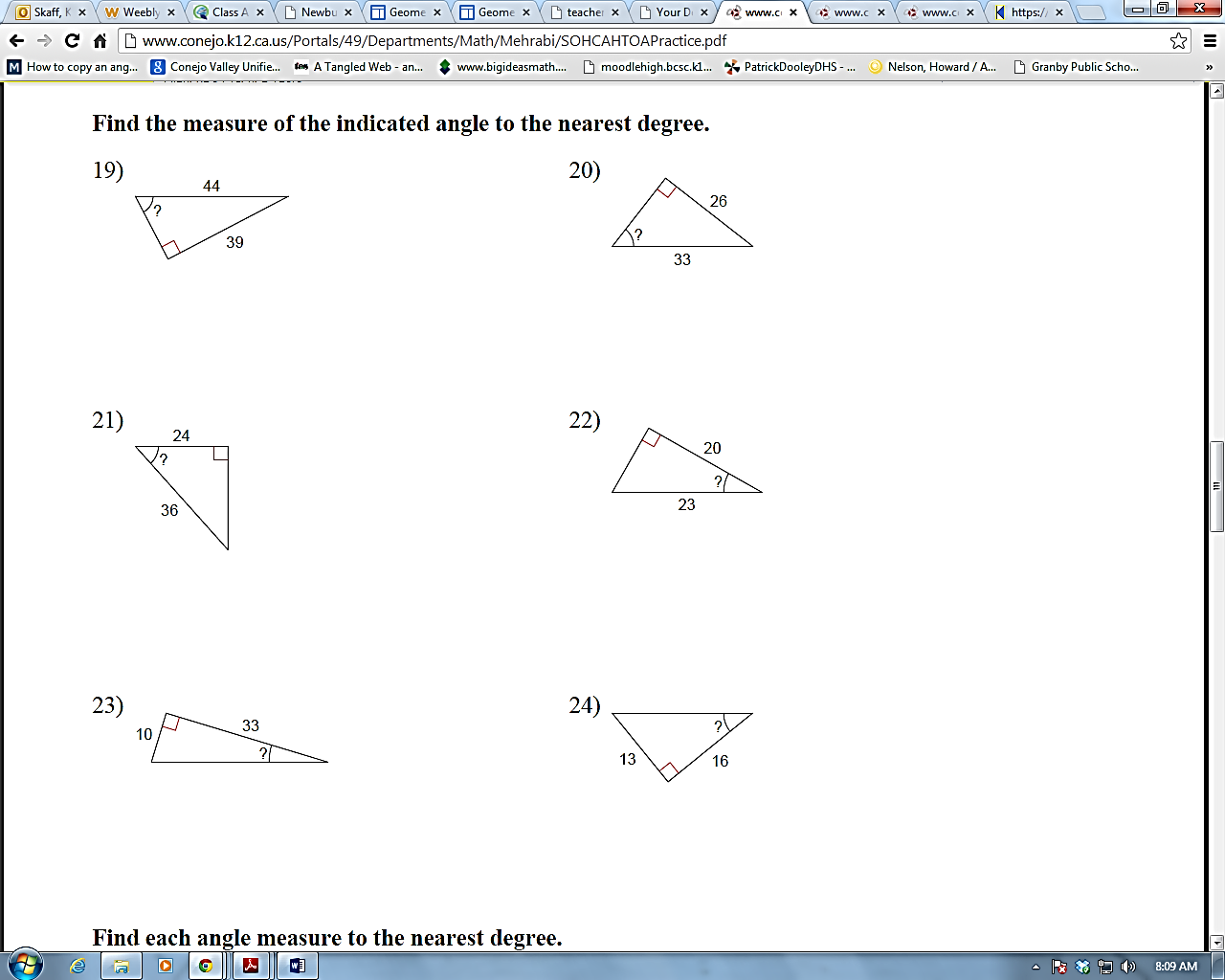
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