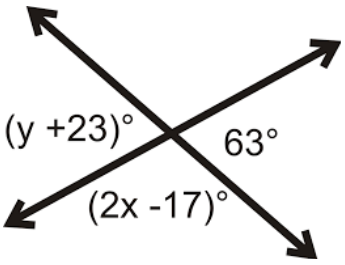
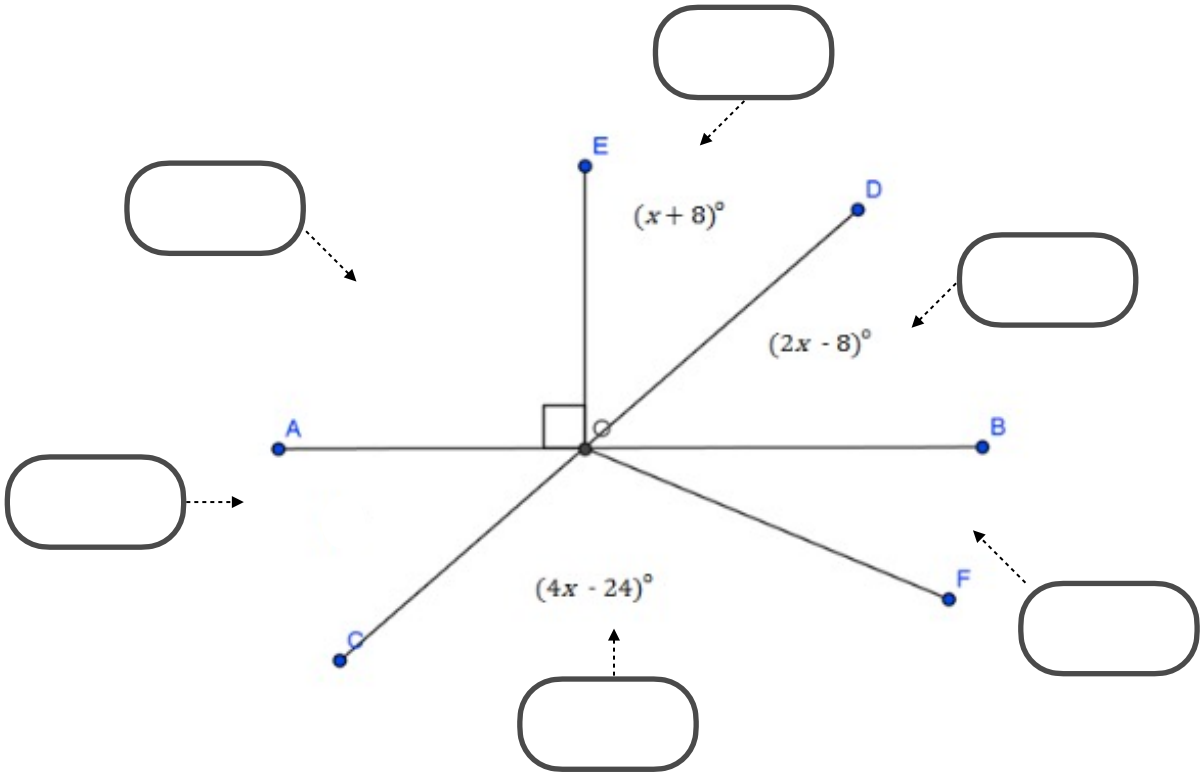
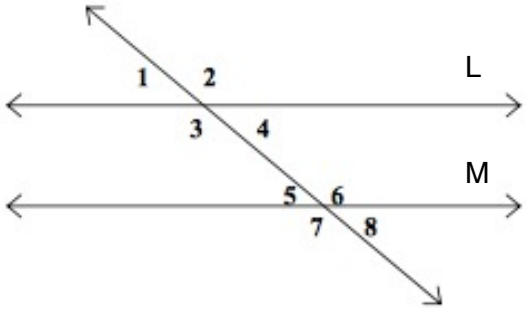
1. ***Use what you know about vertical angles to solve for X and Y below.***



2. ***Use what you know about angle pair relationships to reveal angles degrees. Write solution in the corresponding bubble.***





3. USE THE DIAGRAM ABOVE TO ANSWER THE QUESTIONS BELOW! Line L is Parallel to Line M.

a. What is the alternate interior angle to angle 3?

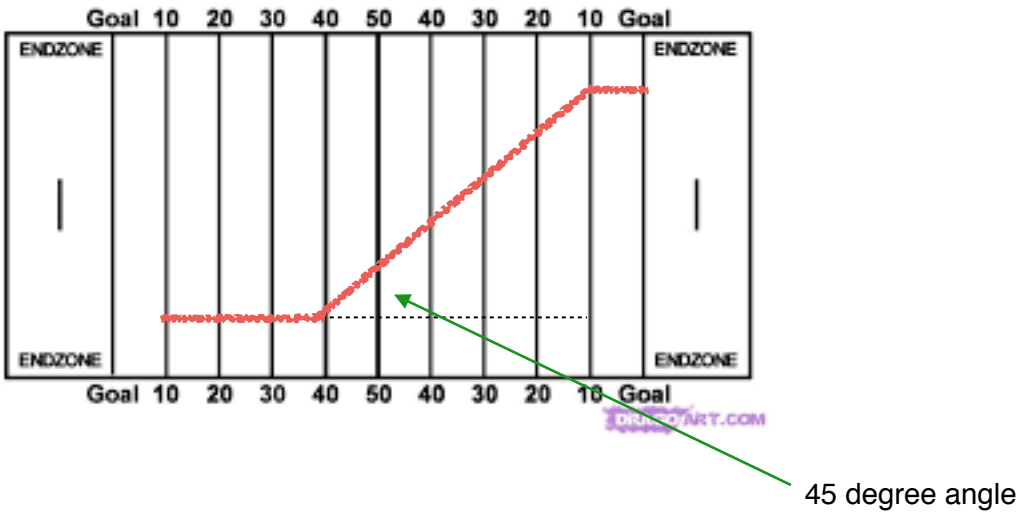
b. What is the alternate exterior angle to angle 8?

c. Angle 6 and Angle 7 have equal measures. Why?

d. Angle 3 and Angle 7 have equal measures. Why?

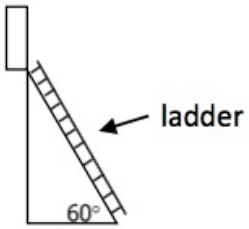
e. What is the line that cuts through line L and line M called?

4. Mr. Yasin played football for the UCLA Bruins. In one kick-off return, he ran this path to a touchdown. How many total yards did he run.

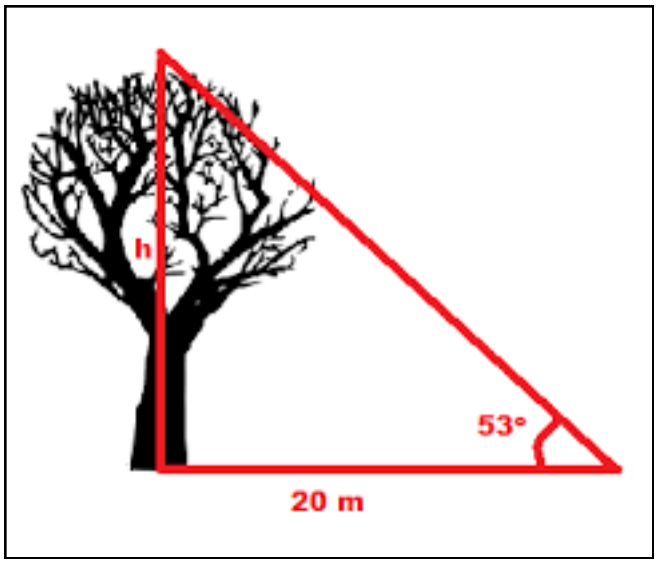


5. ***Use Special Right Triangles to solve the following problem.***

An extension ladder forming a 60° angle with the ground is placed against an outside wall. The top of the ladder touches a window sill that is 12 feet high. To what length is the ladder extended? How far from the wall is the bottom of the ladder? Give answers in radical form and decimal to nearest tenth.



6. ***Use what you know about trig to find the height of the tree below.***



7. ***The Leaning Tower of Pisa is 55 m tall. The top edge of the tower is 5 m out from the bottom edge. What is the angle created between the ground and the tower?***