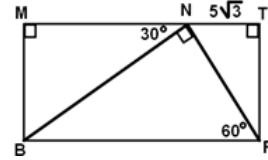**Monday**

What is the approximate length of $\overline{MN}$ if $\overline{NT} = 5\sqrt{3}$? Leave your answer as a simplified radical (not a decimal)!
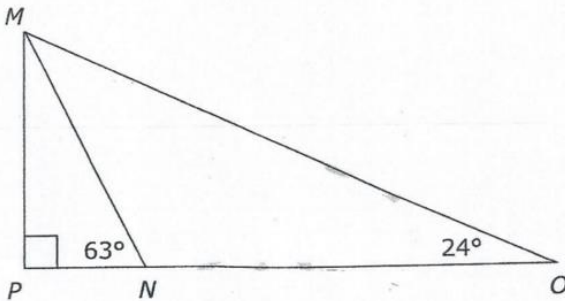

Tuesday

Simplify: $\left(5x^5 - 2x^2 + x - 12\right) - \left(3x^4 - x^2 + 9\right)$

Wednesday

A school map is placed on a coordinate grid. The front office is located at the point O (3, 7), the library is located at the point L (7, 4), and the cafeteria is located at the point C (5, 8). What is the ratio of the length of $\overline{OC}$ to the length of $\overline{LC}$?

Thursday

In the diagram below, Triangle MPO is a right triangle and $\overline{PN} = 24$ ft.

What is the length of $\overline{MP}$?
How much longer is $\overline{MO}$ than $\overline{NM}$?
How far is point O from point N?

Friday: Solve these three word problems using right triangle trigonometry

A 47 inch goal post is leaning against a fence. If the post is 22 inches away from the base of the fence, what angle is formed between the ground and the post?

A plane takes off at an elevation of 33°. What will the ground distance be of the plane be when it reaches an altitude of 32,050 feet?

The ski slope known as Devil's Hill has an elevation from the ground of 45°. If the distance down the slope is 1500 meters, what is the altitude of the hill?