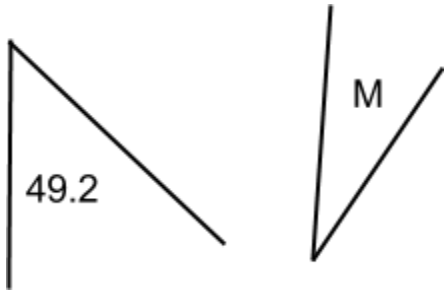
Geometry Applications Mixed Practice

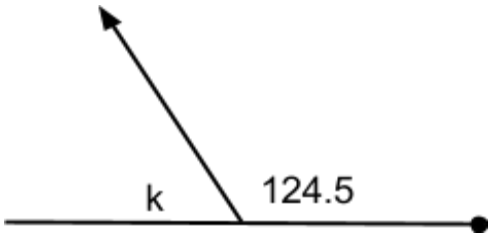
Name: _____ Class: _____

For each problem, write an equation to represent the given situation. Show all work steps to solve. Be sure to check that your solution makes sense for the situation, and label it correctly.

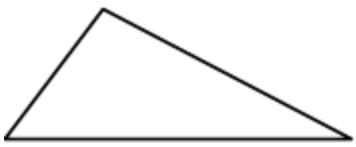
1) m∠ P and m∠ M are complementary. Write an equation and find the value of angle M.



2) Write an equation and find the value of m∠ k.



3) Find the height if $A = 30\ in^2$

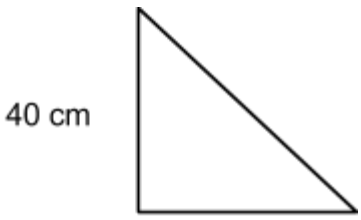


Formula:

Substitution:

Answer: _____

4) Find the length of the base if $A = 3600\ cm^2$



Formula:

Substitution:

Answer: _____

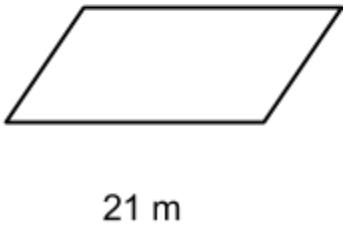
5) Find the length of the base if $A = 150.5\, ft^2$

Formula:

Substitution:

Answer: _____

6) Find the height if $A = 105\ m^2$

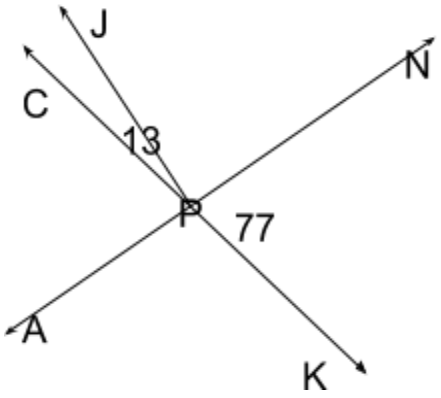


Formula:

Substitution:

Answer: _____-

7) In the figure below, $PJ \perp \overline{AN}$. Write an equation to: a) Find the m∠ APK and b) find the m∠CPA.



8) In Δ MET, the m∠ E = 32°, and the m∠ T = 112°. What is the m∠ M?

9) A trapezoid has an area of 22.5 square inches. The bases are 9 inches and 6 inches. Find the height.

formula:

picture:

Substitution:

solution: _____