Name: _____

H. Geometry 6.1 - 6.3 Puzzle Activity

You will be solving problems below (and you must show your work). When you solve each problem, the letter of the answer you have chosen will go above that number. If you solve all problems correctly, you will have the answer to the riddle:

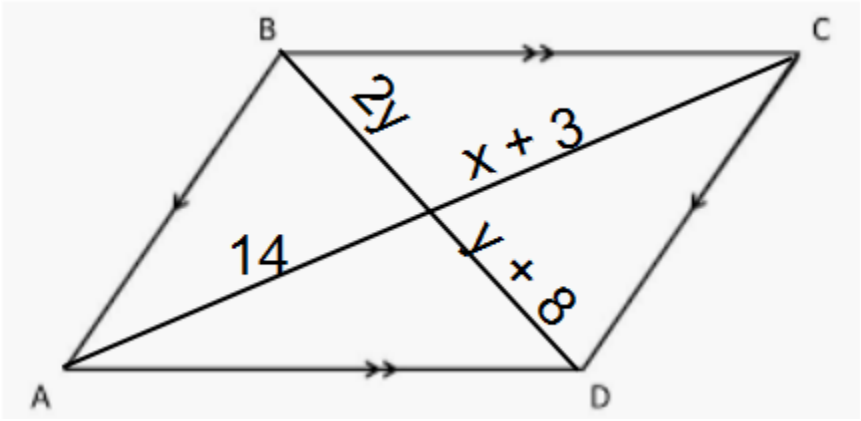
Which state has the most math teachers?

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7 8 9 10 11 12 13 14

#3

Find x and y.



If x = 14 and y = 8, then write E above 3

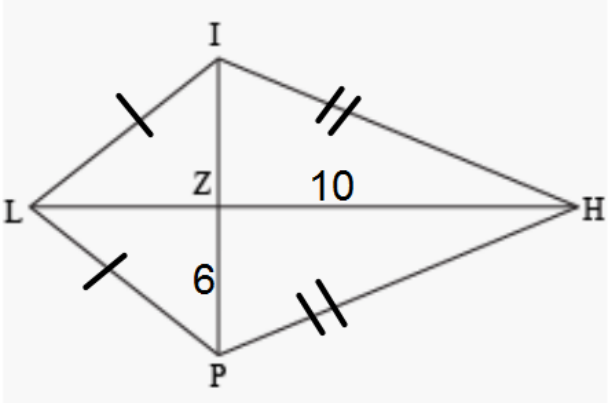
If x = 8 and y = 14, then write L above #3.

If x = 11 and y = 8, then write T above #3.

If x = 8 and y = 11, then write S above #3.

#13:

Find PI



If PI = 6, then write R above #13.

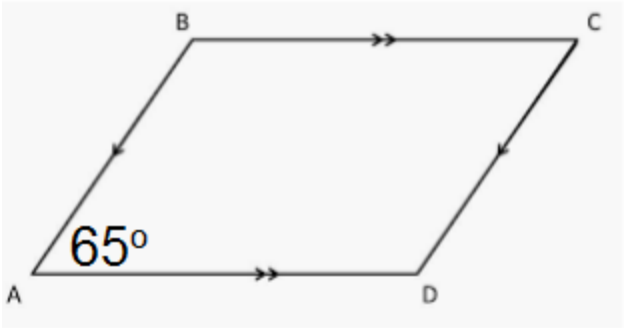
If PI = 12, then write S above #13.

If PI = 10, then write E above #13.

If PI = 16, then write H above #13.

#7

Find the measure of $\angle B$.



If $65°$, then write S above #7.

If $180°$, then write N above #7.

If $360°$, then write I above #7.

If $115°$, then write H above #7.

#9

Find the sum of the interior angles of a 9-sided polygon.

If $40°$, then write O above #9.

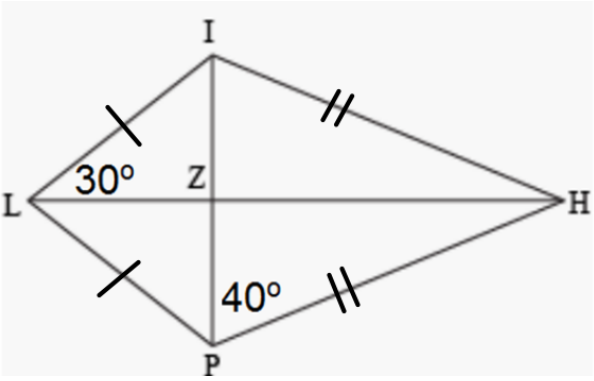
If $180°$, then write D above #9.

If $1260°$, then write S above #9.

If $1620°$, then write R above #9.

#5

Find the measure of $\angle IZH$



If $30°$, then write S above #5.

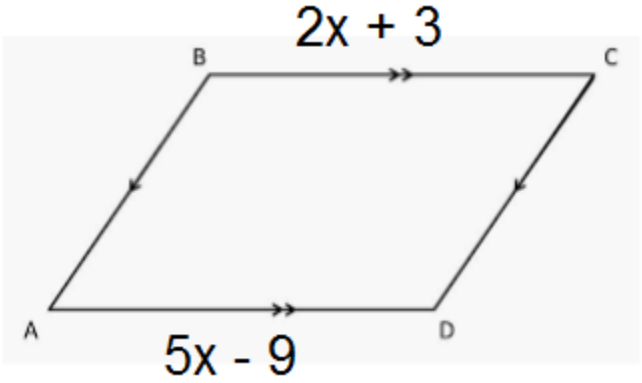
If $40°$, then write R above #5.

If $90°$, then write A above #5.

If $60°$, then write E above #5.

#14

Find x.



If 3, then write “?”above #14.

If 4, then write “!!” above #14.

If 6, then write “.” above #14.

If 1, then write “!” above #14.

#1

The measure of an exterior angle of a regular polygon is 40°. How many sides does it have?

If 5, then write N above #1.

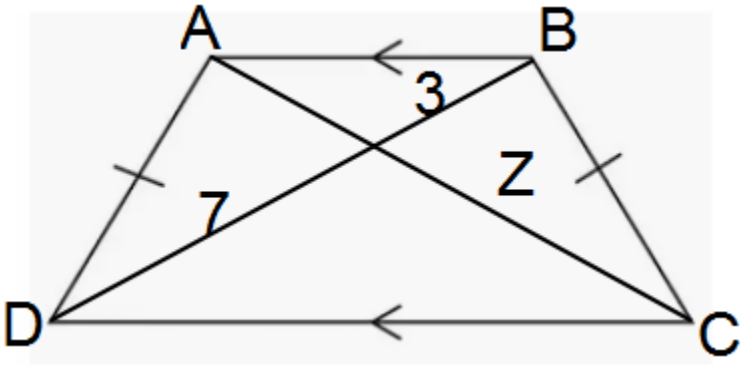
If 7, then write B above #1.

If 9, then write M above #1.

If 11, then write P above #1.

#8

Find AC.



If 3, then write C above #8.

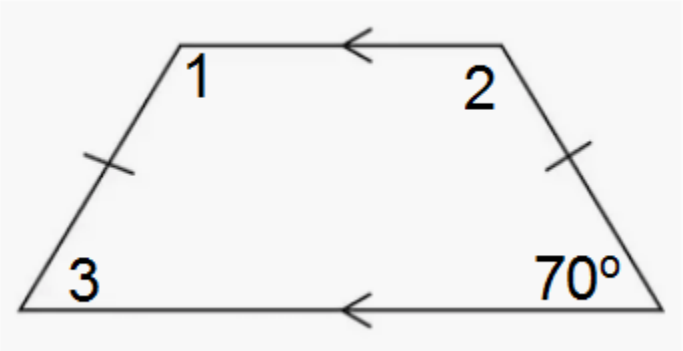
If 4, then write P above #8

If 7, then write M above #8.

If 10, then write U above #8.

#12

Find the measure of $\angle 3$.



If $70°$, then write T above #12.

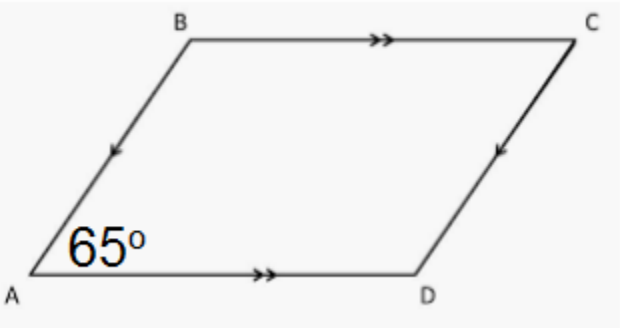
If $180°$, then write A above #12.

If $360°$, then write R above #12.

If $110°$, then write S above #12.

#2

Find the measure of $\angle C$.



If $65°$, then write A above #2.

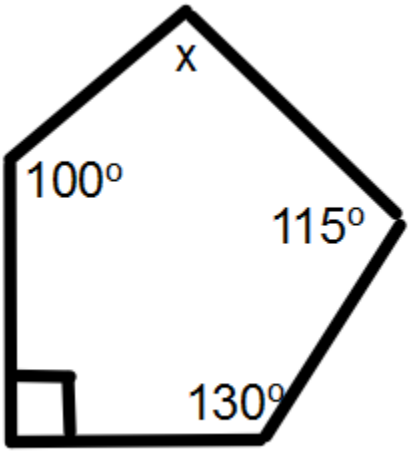
If $180°$, then write W above #2.

If $360°$, then write P above #2.

If $115°$, then write I above 2.

#11

Find the value of x.



If $115°$, then write D above #11.

If $105°$, then write T above #11.

If $90°$, then write L above #11

If not possible, then write U above #11.

#10

A polygon has interior angles whose sum is $2880°$. How many sides does the polygon have?

If 18, then write E above #10.

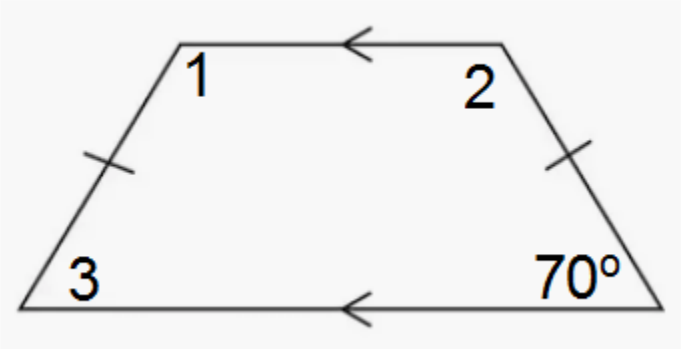
If 20, then write K above #10.

If 14, then write A above #10.

If 16, then write N above #10.

#6

Find the measure of $\angle 1$.



If $70°$, then write P above #6.

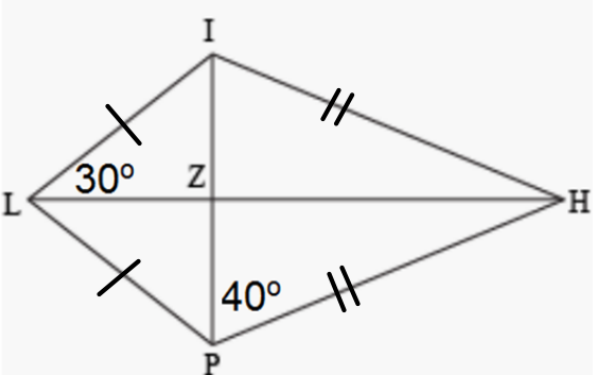
If $180°$, then write T above #6.

If $360°$, then write R above #6.

If $110°$, then write C above #6.

#4

Find the measure of $\angle LPI$



If $30°$, then write T above #4.

If $40°$, then write E above #4.

If $90°$, then write R above #4.

If $60°$, then write H above #4.