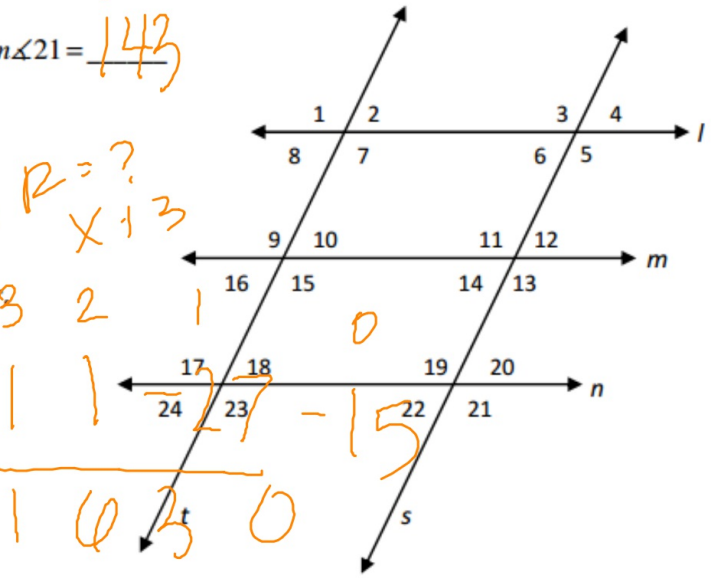
Day 57 Bellwork: Have your homework out and then complete the following

1. Given $l \parallel m \parallel n$ and $s \parallel t$, and $m\angle 1 = 143°$, find

$m\angle 2 =$ 37 $m\angle 11 =$ 143 $m\angle 20 =$ 37

$m\angle 3 =$ 143 $m\angle 12 =$ 37 $m\angle 21 =$ 143



2. Is $x - 5$ a factor of the function

$f(x) = x^3 + x^2 - 27x - 15$?

Show work supporting your answer

yes √ 5 | 1 1 -27 -15

1 6 3 0

$x^2 + 6x + 3$

p = -1

p = ?

x = 3

3 2 1 0

Day 55 Bellwork: Have your homework out and then complete the following

1. $\dfrac{6x^3 - 16x^2 + 17x - 6}{3x - 2}$

2. $\dfrac{x^4 + 3x^2 + 1}{x^2 - 2x + 3}$

What does CPCTC stand for?

C

P

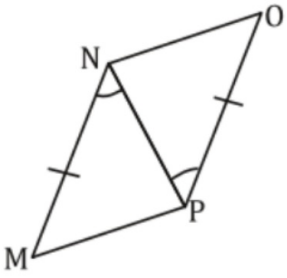
C

T

C

Example 1:

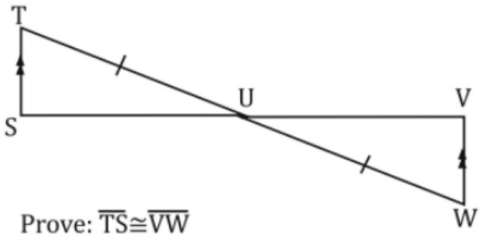
Given: $\angle MNP \cong \angle OPN$, and $\overline{MN} \cong \overline{OP}$



Prove: $\overline{MP} \cong \overline{NO}$

Example 2:

Given: $\overline{TS} \| \overline{VW}$, $\overline{TU} \cong \overline{WU}$

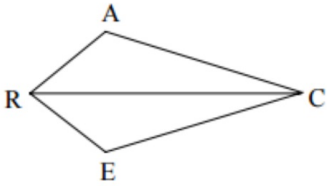


Prove: $\overline{TS} \cong \overline{VW}$

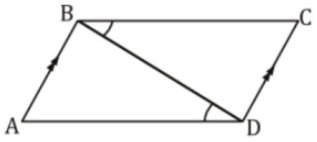
You try...

1. Given: $\overline{AR} \cong \overline{ER}$
$\overline{AC} \cong \overline{EC}$

Prove: $\angle E \cong \angle A$



2. Given: $\overline{AB} \| \overline{DE}$, $\angle CBD \cong \angle ADB$

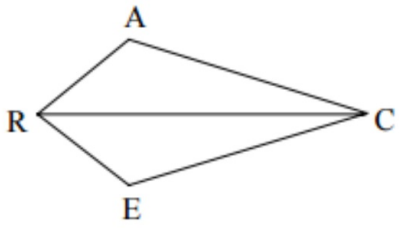


Prove: $\overline{BC} \cong \overline{AD}$

Prove with a flow proof!

Given: $\overline{AR} \cong \overline{ER}$
$\overline{AC} \cong \overline{EC}$

Prove: $\angle E \cong \angle A$

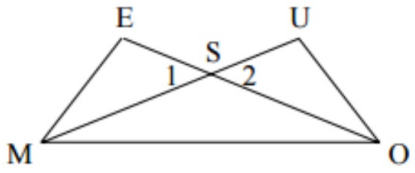


Prove: $\angle E \cong \angle A$

_____ Given		
$\overline{AC} \cong \overline{EC}$	$\Delta RCE \cong \Delta RCA$	_____ Definition of congruent triangles or CPCTC
_____ $\overline{RC} \cong \overline{RC}$ Reflexive property of congruence	_____	

2. Given: $\overline{SE} \cong \overline{SU}$
$\angle E \cong \angle U$

Prove: $\overline{MS} \cong \overline{SO}$



$\overline{SE} \cong \overline{SU}$		
_____		
_____ Given	Δ ____ $\cong \Delta$ ____ Angle-Side-Angle congruence	_____ Definition of congruent triangles or CPCTC
$\angle 1 \cong \angle 2$		
_____		

3. Given: M is the midpoint of $\overline{AB}$.
M is the midpoint of $\overline{CD}$.

Prove: $\overline{AC} \cong \overline{BD}$