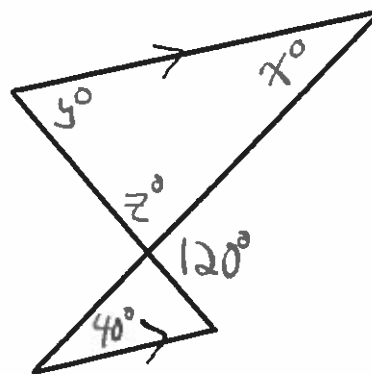


Geometry: Please clear your desk except for...

1. Assignment #27
2. Signed/corrected quizzes
3. SNB and Ruler

Find x , y , and z . Justify all answers.



① $z + 120 = 180^\circ$ $\{ \angle \text{Add. Post.} \}$

$z = 60$

② $x = 90$ $\{ \text{Alt. Int. } \angle \text{s Thm} \}$

③ $y + z + x = 180^\circ$ $\{ \text{A sum thm} \}$

$y + 40 + 60 = 180$

$y = 80$

Accepted Formulas from Chapter 3

① $E_{\text{sum}} = 360^\circ$

② $I_{\text{sum}} = (n-2)180^\circ$

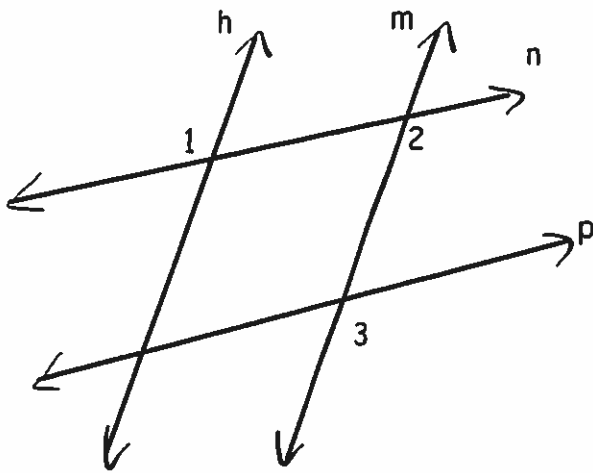
③ $I_1 = \frac{(n-2)180^\circ}{n}$

④ $E_1 = \frac{360^\circ}{n}$

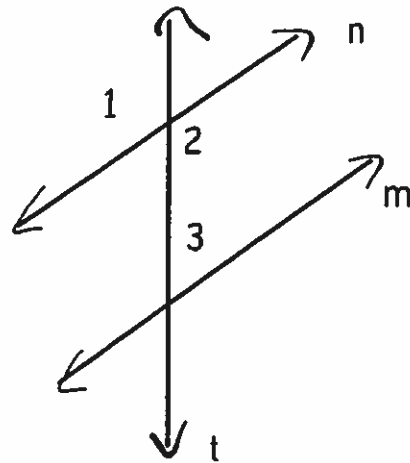
⑤ $I_1 + E_1 = 180^\circ$

What can you prove about the given lines or angles in the following diagrams? State the postulate or theorem you used.

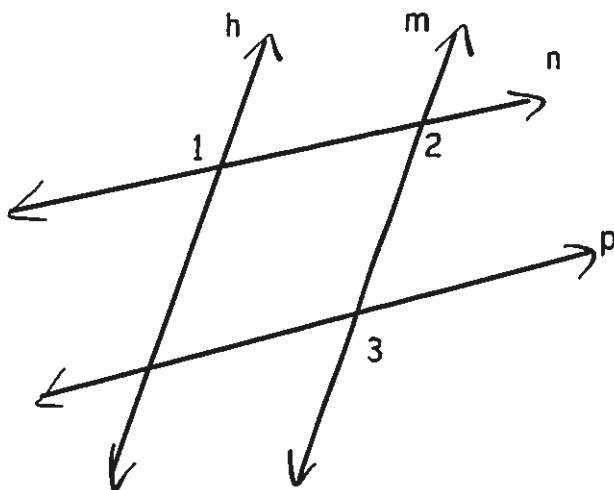
1. Given: $\angle 1 \cong \angle 3$ and $n \parallel p$



2. Given: $\angle 2 \cong \angle 3$

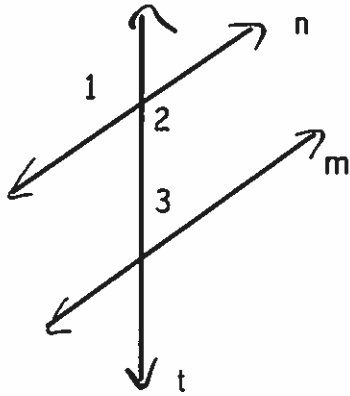


1. Given: $\angle 1 \cong \angle 3$ and $n \parallel p$



- ① $\angle 1 \cong \angle 3, n \parallel p$ [Given]
- ② $\angle 2 \cong \angle 3$ [Cor. \angle post.]
- ③ $\angle 1 \cong \angle 2$ [Trans. Prop. of \cong]
- ④ $h \parallel m$ [Alt. Ext. \angle s converse]

2. Given: $\angle 2 \cong \angle 3$



- ① $\angle 2 \cong \angle 3$ [Given]
- ② $\angle 1 \cong \angle 2$ [Vert. \angle s Thm]
- ③ $\angle 1 \cong \angle 3$ [Trans. Prop. \cong]

p. 103 CE #9 - DO NOT COPY THE TABLE!!!!!!!

Complete parts a - g.

a. $n = 6$

or a. $n = 6$

① $I_1 = \frac{(n-2)180^\circ}{n}$]*

① $E_1 = \frac{360}{n}$]*

$I_1 = \frac{4(180)}{6}$

$E_1 = \frac{360}{6}$

$I_1 = \frac{720}{6}$

$E_1 = 60^\circ$

$I_1 = 120^\circ$

② $I_1 + E_1 = 180^\circ$]*

② $I_1 + E_1 = 180^\circ$]*

$E_1 = 60^\circ$

$I_1 = 120^\circ$

d. $E_1 = 10^\circ$

① $I_1 + E_1 = 180$

$I_1 = 170^\circ$

② $E_1 = \frac{360}{n}$

$n(10) = \left(\frac{360}{n}\right)n$

$n \neq 0$,
of
sides

$10n = 360$

$n = 36$

f. $I_1 = 179^\circ$

① $I_1 + E_1 = 180^\circ$

$E_1 = 1^\circ$

② $E_1 = \frac{360}{n}$

$n(1) = \left(\frac{360}{n}\right)n$

$n \neq 0$
of
sides

$n = 360$

Assignment #28

Part I: Chapter Review p. 111-112 #1-15, 17-19

Part II: Chapter Test p. 112-113 #1-13

Finalize your Chapter 3 Study Guide!