HOMEWORK... ? ? ?

Page 99: 1, 3, 4, 5, 10, 11, 16

HISTORY on Buckyball Do A, B and C

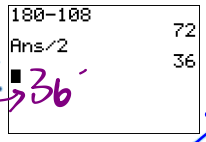
$S = 180°(n-2)$

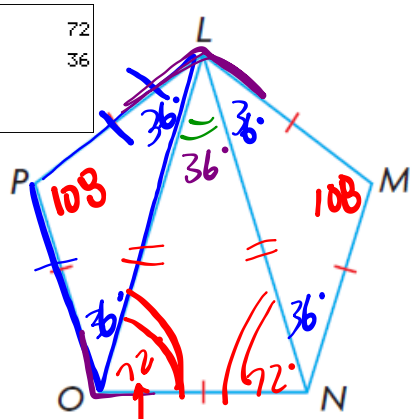
10. *LMNOP* is a regular pentagon.

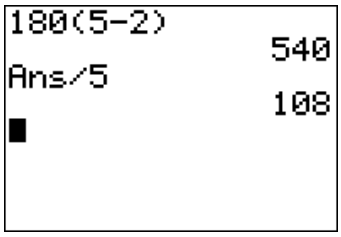
a) Determine the measure of $\angle OLN$.

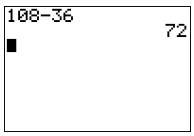
b) What kind of triangle is $\triangle LON$? Explain how you know.

Isosceles Δ



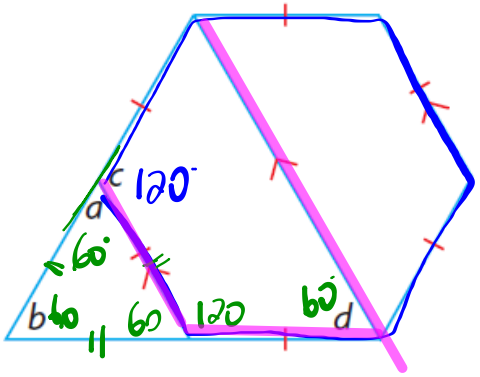




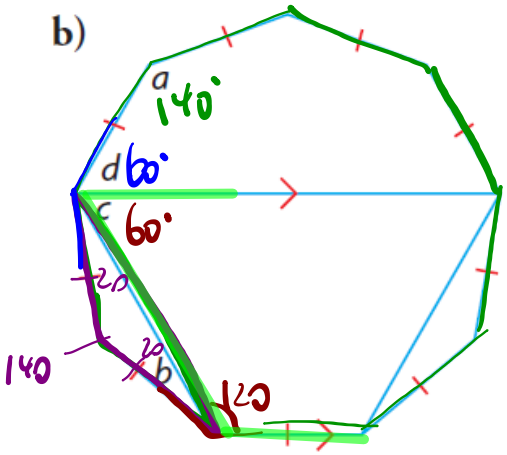


16. In each figure, the congruent sides form a regular polygon. Determine the values of a, b, c, and d.

a)



b)



$a =$

180(9−2)	1260
Ans/9	140

UNIT TEST... Chp. 1 - Inductive/Deductive

Chp. 2 - Angle Properties

REVIEW / PRACTICE TIME...

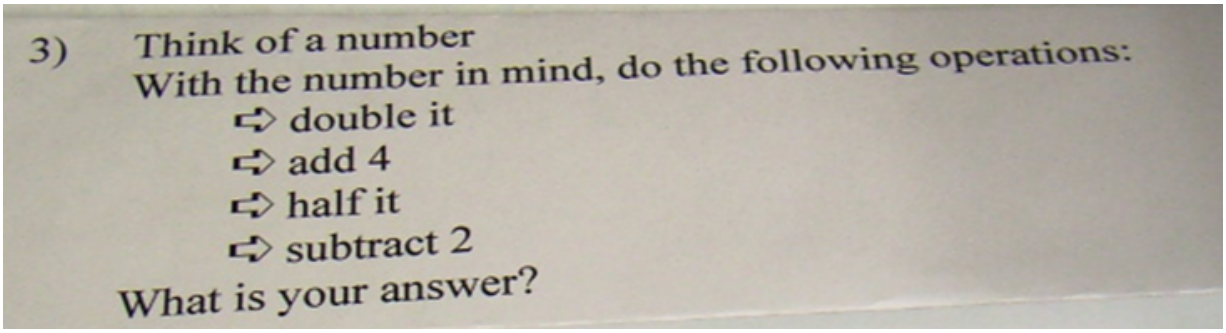
CHAPTER 1...

- p. 34: Mid Chp Review (FAQ)
- p. 35: Mid Chp Practice Ques.
- p. 59: Chp Review (FAQ)
- p. 61: Chp Practice (omit 1.7)
- p. 58: Practice Test

CHAPTER 2...

- p. 84: Mid Chp Review (FAQ)
- p. 85: Mid Chp Practice Ques.
- p. 105: Chp Review (FAQ)
- p. 106: Chp Practice
- p. 104: Practice Test

WARM-UP...


3) Think of a number
With the number in mind, do the following operations:
- double it
- add 4
- half it
- subtract 2

What is your answer?

Inductively:

11
22
26
13
(11)

Deductively:

n

$\frac{2n+4}{2}$

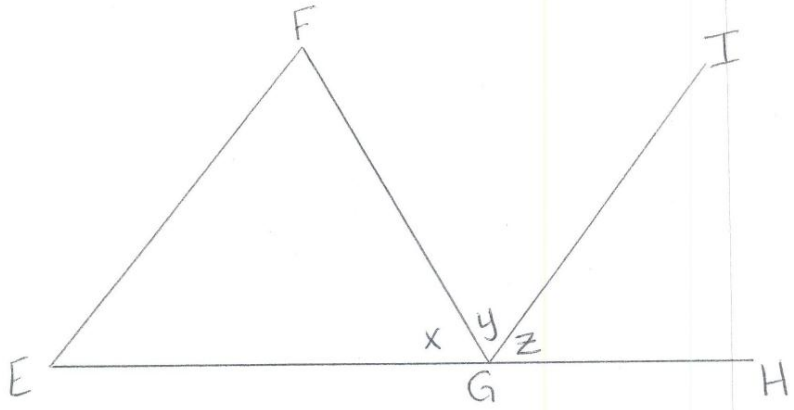
$n+2-2$

(n)

In $\triangle EFG$, GI bisects $\angle FGH$

If $\angle E = \angle y$, then prove that $EF \parallel GI$

(2)

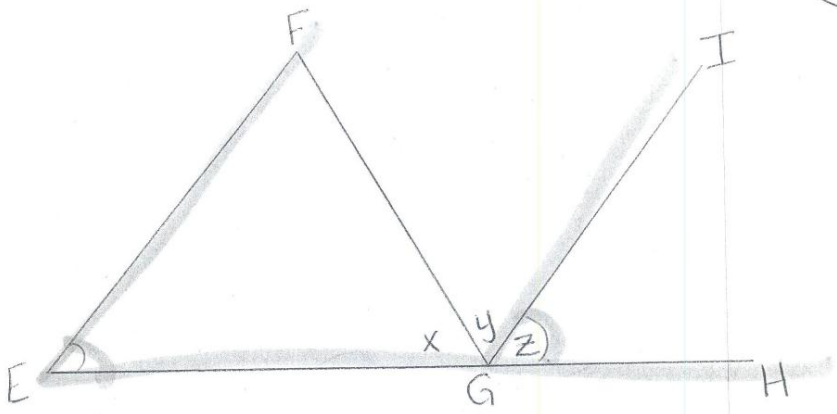


Statements	Justifications

In $\triangle EFG$, GI bisects $\angle FGH$

If $\angle E = \angle y$, then prove that $EF \parallel GI$

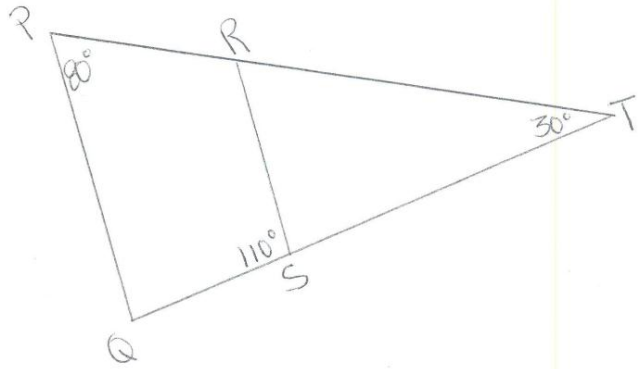
(2)



Statements	Justifications
$\angle y = \angle z$	given GI bisects $\angle FGH$
$\angle y = \angle E$	given
$\angle E = \angle z$	transitive
$EF \parallel GI$	corresponding angles are equal.

(4)

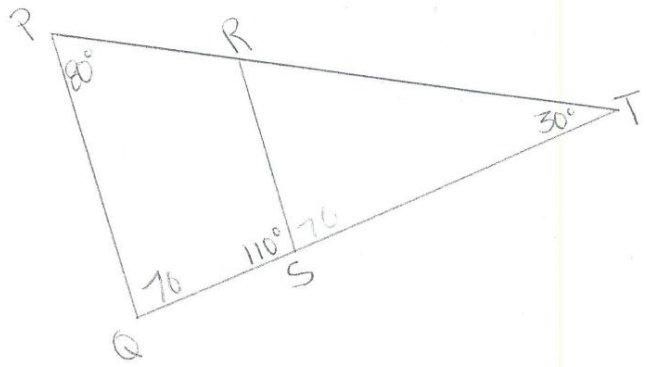
Prove PQ // RS



Statements	Justifications

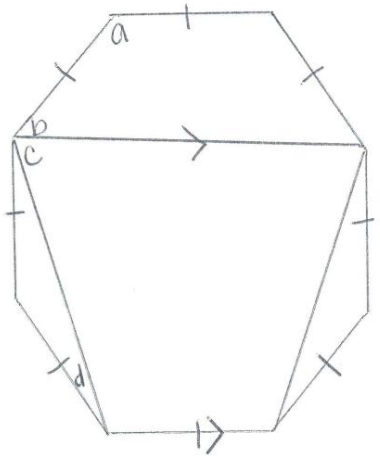
(4)

Prove PQ // RS



Statements	Justifications
$\angle Q + \angle P + \angle T = 180°$ $\angle Q + 80° + 30° = 180°$ $\angle Q = 70°$	Sum of interior angles of a $\triangle$ Substitution Subtraction
$\angle QSR + \angle RST = 180°$ $\angle RST + 110° = 180°$ $\angle RST = 70°$	Supplementary angles Substitution Subtraction
PQ // RS	Corresponding angles ($\angle Q$ and $\angle RST$ are equal)

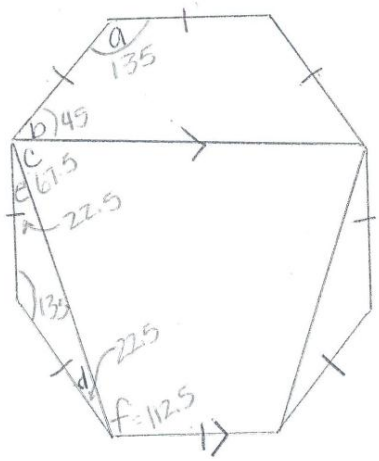
Determine the values of a, b, c, and d. (5)



Show all your work!

a= b= c= d=

Determine the values of a, b, c, and d. (5)



Show all your work!

→ $S(n) = 180(n-2)$
$S(8) = 180(8-2)$
$= 180(6)$
$= 1080$

→ measure of each angle of the octagon ∴ $\angle a$
$\angle a = \frac{1080}{8} = 135°$

→ $d = e$ (isosceles triangle)
$135 + 2e = 180$
$e = 22.5$
$d = 22.5$

→ $180 - f = c$ (co-interior) $f = 135 - d$
$f = 112.5$
$180 - 112.5 = c$
$c = 67.5$

→ $135 - e - c = b$ $135 - 22.5 - 67.5 = b$
$b = 45°$

$a = 135°$ $b = 45°$ $c = 67.5°$ $d = 22.5°$