

ADU GEO CH 1 TEST FORMAT

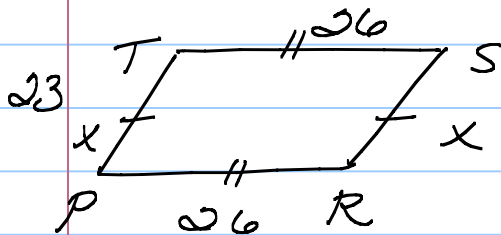
		estimated:
I	Always Sometimes Never	5
II	Arithmetic or Algebra	1-1½ PG
III	PROOF	
	A. FILL IN (STATEMENTS AND/OR REASONS)	1-1½ PG
	B. WRITE THE PROOF	2-3

SEE REV #11

NO TI PROOF (MAYBE EXTRA CREDIT)

HAND-IN

- REVIEW
- SYSTEM



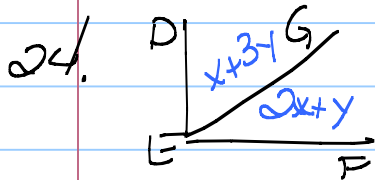
← five times RS, ten more than

$$2x + 52 = 5x + 10$$

$$42 = 3x$$

$$14 = x$$

$$RS = 14$$



$\angle DEF = 90^\circ$

b) $\angle DEG \cong \angle GEF$

$$x + 3y = 2x + y$$

$$\ast 2y = x$$

$$\angle DEG + \angle GEF = \angle DEF$$

$$x + 3y + 2x + y = 90^\circ$$

$$3x + 4y = 90 \ast$$

$$4y = -3x + 90$$

$$y = -\frac{3}{4}x + \frac{45}{2}$$

$$\begin{cases} x - 2y = 0 \\ 3x + 4y = 90 \end{cases}$$

a)

$$\begin{cases} x - 2y = 0 \\ 3x + 4y = 90 \end{cases}$$

Solve Linear System with

① Substitution

* ② Elimination

$$\begin{cases} 2x - 4y = 0 \\ 3x + 4y = 90 \end{cases}$$

$$5x = 90$$

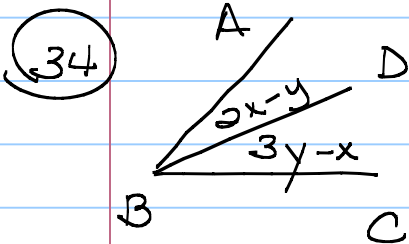
$$x = 18$$

$$\text{IF } x = 18 \text{ THEN } x = 2y \Rightarrow 18 = 2y \\ 9 = y$$

means solution set $\rightarrow \{(18, 9)\}$

31 $\frac{812x}{A} \quad \frac{2469x}{B} \quad \frac{180}{C}$ $\text{diag} \Rightarrow \text{st} \angle$
 $\text{st} \angle \Rightarrow 180^\circ$

$$812x + 2469x = 180$$



\vec{BD} bis $\angle ABC \Rightarrow \angle DBC \cong \angle ABD$
 $m\angle ABC = 25$

$$\begin{aligned} 3y - x &= 2x - y \\ 4y &= 3x \end{aligned}$$

$$3x - 4y = 0$$

$$\angle ABD + \angle DBC = \angle ABC$$

$$2x - y + 3y - x = 25$$

$$x + 2y = 25$$

$$\begin{cases} x + 2y = 25 \\ 3x - 4y = 0 \end{cases} \Rightarrow x = \underline{\underline{-2y + 25}}$$

$$3(-2y + 25) - 4y = 0$$

$$-6y + 75 - 4y = 0$$

$$-10y + 75 = 0$$

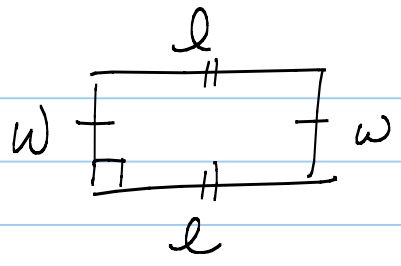
$$75 = 10y$$

$$15/2 = y$$

Find x: $x + 2(\frac{15}{2}) = 25$
 $x + 15 = 25$
 $x = 10$

$$\{(10, \frac{15}{2})\}$$

37



$P = 20$

$l: 0 < l < 4$
 $w:$

$2l + 2w \leq 20$

$2l + 2w > 20$

IF $l > 0$ $2(0) + 2w \leq 20$

IF $l < 4$ $2(4) + 2w > 20$

$\frac{2w \leq 20}{2}$

$8 + 2w > 20$

$2w > 12$

$w < 10$

$w > 6$

$6 < w < 10$

36. $\angle R = 90^\circ$

$x^2 - 27x$

$x^2 - 27x = 90$

$x^2 - 27x - 90 = 0$

$(x - 30)(x + 3) = 0$

if $x - 30 = 0$ if $x + 3 = 0$

$x = 30$ $x = -3$

Test $x = 30$

$(30)^2 - 27(30)$

Test $x = -3$

$(-3)^2 - 27(-3)$

think $30x - 27x$

$30(30) - 27(30)$

$(3)(3) + 27(3)$

$3(30) = 90$

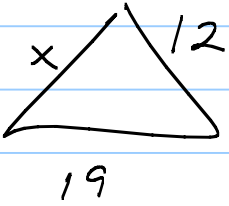
$30(3) = 90$

works

works

$\{-3, 30\}$

33.



DIFF

SUM

$$7 < x < 31$$

29. $m\angle 1 = ?$

$$\underline{60^\circ 29' \quad 70^\circ 40' 16''}$$

$$\begin{array}{r} 70^\circ 40' 16'' \\ 60^\circ 29' \\ \hline 130^\circ 69' 16'' \\ 131^\circ 9' 16'' \end{array}$$

$$\begin{array}{r} 180^\circ \rightarrow 179^\circ 59' 60'' \\ 131^\circ 9' 16'' \\ \hline 48^\circ 50' 44'' \end{array}$$