

$$10a - 6 = 8a + 33$$

$$2a = 39$$

$$a = 19.5$$

$$2b + 41 = 7b - 59 = 130$$

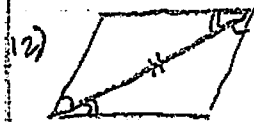
$$9b - 13 = 130$$

$$9b = 143$$

$$b = 22$$



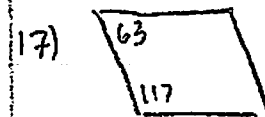
YES → BOTH PAIRS OF OPPOSITE SIDES ARE CONGRUENT



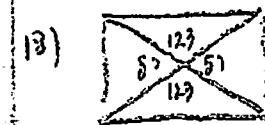
YES → BOTH Δ 'S ARE CONGRUENT BY ASA THEREFORE BOTH PAIRS OF OPPOSITE SIDES ARE CONGRUENT BY CPCTC



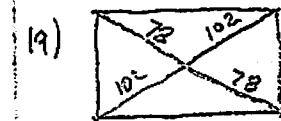
NO



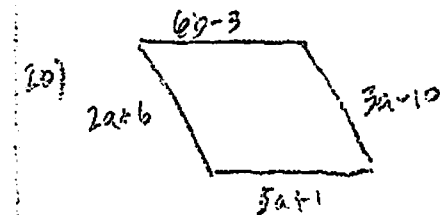
NO → NEED BOTH PAIRS OF CONSECUTIVE ANGLES TO BE SUPPLEMENTARY



NO → NO SIDES (ANGLE)



YES - DIAGONALS BISECT EACH OTHER



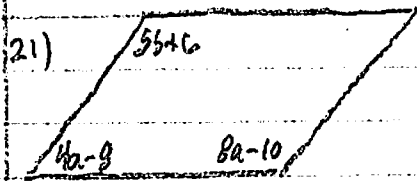
$$3a - 10 = 2a + 6$$

$$a = 16$$

$$6b - 3 = 31$$

$$6b = 34$$

$$b = 14$$



$$4a - 8 + 8a - 10 = 180$$

$$12a - 18 = 180$$

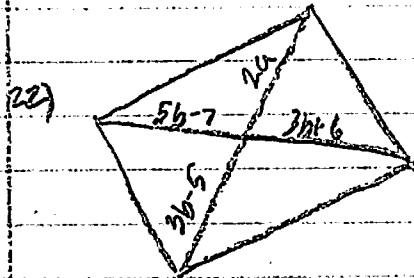
$$12a = 198$$

$$a = 16.5$$

$$5b + 6 = 122$$

$$5b = 116$$

$$b = 23.2$$



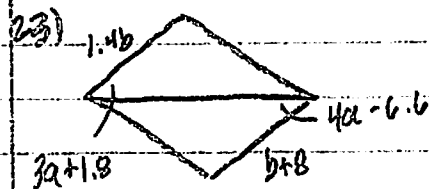
$$5b - 7 = 2b + 6$$

$$2b = 13$$

$$b = 6.5$$

$$2a = 14.5$$

$$a = 7.25$$



$$1.4b = b + 8$$

$$.4b = 8$$

$$b = 20$$

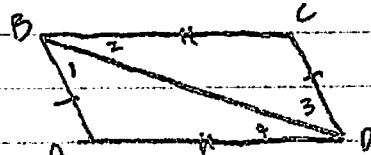
$$4a - 6.6 = 3a + 1.8$$

$$a = 8.4$$

26) GIVEN: $\overline{AB} \cong \overline{CD}$

$\overline{BC} \cong \overline{DA}$

PROVE: ABCD IS A PARALLELOGRAM



STATEMENT	REASON
1) $\overline{AB} \cong \overline{CD}$; $\overline{BC} \cong \overline{DA}$	1) GIVEN
2) $\overline{BD} \cong \overline{BD}$	2) REFLEXIVE PROP OF \cong
3) $\triangle DAB \cong \triangle BCD$	3) SSS
4) $\angle 1 \cong \angle 3$	4) CPCTC
5) $\angle 4 \cong \angle 2$	5) CPCTC
6) $\overline{AB} \parallel \overline{CD}$; $\overline{BC} \parallel \overline{DA}$	6) CONVERSE OF ALT. INT. \angle 'S
7) ABCD IS A PARALLELOGRAM	7) DEF. OF PARALLELOGRAM