17.

$$(x)^2 = \left(\sqrt{39x+40}\right)^2$$

$$x^2 = 39x + 40$$

$$-39x \quad -39x \quad -40 \quad -40$$

$$x^2 - 39x - 40 = 0$$

1 · 40
5 · 8
4 · 10
2 · 20

$$(x+1)(x-40) = 0$$

$$x + 1 = 0 \qquad x - 40 = 0$$

$$-1 \quad -1 \qquad +40 \quad +40$$

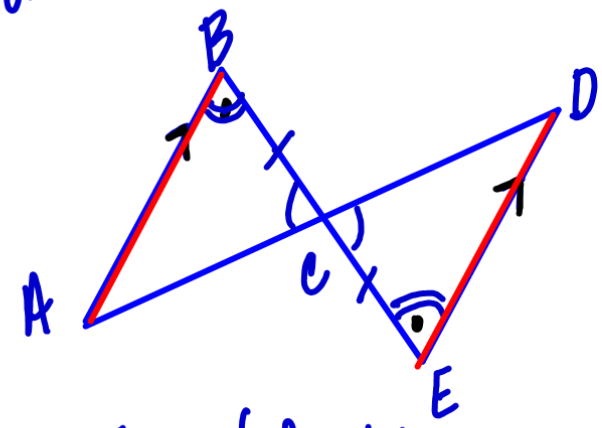
$$x = -1 \qquad x = 40$$

$$x = 40$$

$$m\angle L = 40^\circ$$

~~SSS~~
~~SAS~~
ASA
AAS
~~HL~~

90.



$\overline{BC} \cong \overline{EC}$ Def of midpt.

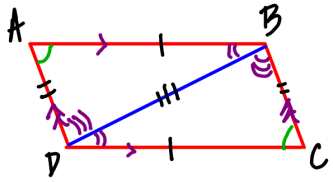
Vert $\angle$s $\cong$ Alt Int $\angle$ $\cong$

$AB \cong DE$ CPCTC

	Statement	Reason
	1. $\overline{AB} \parallel \overline{DE}$, C is midpt. $\overline{DE}$	1. Given
S (Included Side)	2. $\overline{BC} \cong \overline{EC}$	2. Def of midpoint
A	3. $\angle ACB \cong \angle DCE$	3. Vert. $\angle$s Thm.
A	4. $\angle ABC \cong \angle DEC$	4. Alt Int $\angle$s Thm
	5. $\triangle ABC \cong \triangle DEC$	5. ASA Post.
	6. $\overline{AB} \cong \overline{DE}$	6. CPCTC

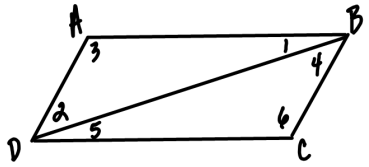
4.5 Proving Δ's ≅

SSS
SAS
ASA
~~AAS~~
HL Right Δ



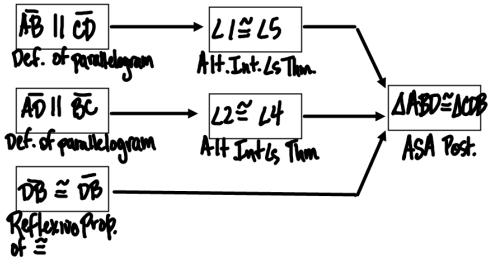
ΔABD ≅ ΔCDB SSS Post

A diagonal of a parallelogram divides the parallelogram into ≅ Δ's

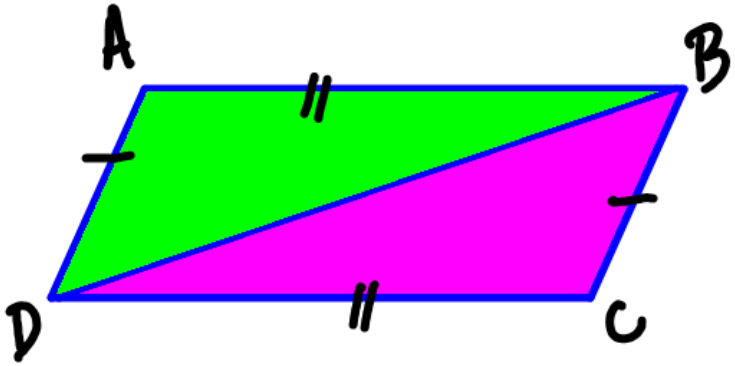


Given: parallelogram ABCD, diagonal $\overline{BD}$

Prove: ΔABD ≅ ΔCDB



Opposite Sides of a parallelogram are congruent



Statements	Reasons.
1. ABCD is a $\square$	1. Given
2. $\triangle ABD \cong \triangle CBD$	2. A diagonal of a $\square$ divides $\square$ into $2 \cong \triangle$'s
3. $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{CB}$	3. CPCTC

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9-22 All