



	SIDES		ANGLES		DIAGONALS			AREA
	Parallel?	Congruent?	Congruent?	Relationship?	Congruent?	Bisecting?	Perpendicular?	
Kite	sometimes 	2 pairs adj by def.	yes at least 1 pair (SSS) 2 cong. Δ's	Sometimes add to 360° 	never	no	yes	
Trapezoid	yes at least one pair by def 	Sometimes 	Sometimes 	Supplementary 2 pairs b/c parallel lines	Sometimes 	Sometimes 	Sometimes 	at least one pair of sim triangles $\frac{(b_1 + b_2)}{2} \cdot h$
* Isosceles Trapezoid	top & bottom (by def)	nonbase are con. bases sometimes	congruent by defn.	always = 360°	always	Sometimes 	Sometimes	congruent by VA then by AAS $\frac{(b_1 + b_2)}{2} \cdot h$
Parallelogram	2 sets parallel sides by def.	2 sets of con. sides ASA	2 sets of opp con. angles	adj angles supp.	sometimes 	sometimes 		2 pairs of congruent triangles $A = b \cdot h$
Rhombus	 2 pairs b/c SSS	4 congruent by def	by AIA 	2 distinct pairs	Sometimes 	always 	yes	4 congruent Δ's by SSS $\frac{d_1 \cdot d_2}{2}$ or $b \cdot h$
Rectangle	yes 2 pairs 	yes 2 opp. con. sides	yes by def	all 4 angles add up to 360° & supplementary SAS	yes by SAS	YES AAS	Sometimes 	$b \cdot h$
Square	yes	yes	yes		yes	yes	yes	

