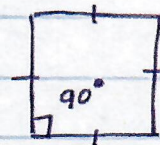
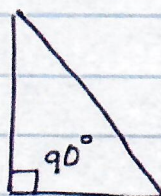
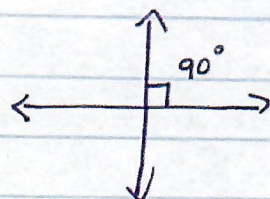


UNIT 5: GEOMETRY

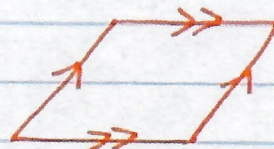
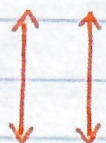
DEF

PERPENDICULAR: MEET AT A 90° (RIGHT) ANGLE



DEF

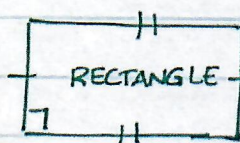
PARALLEL: LINES THAT NEVER TOUCH.



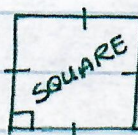
PARALLEL

DEF

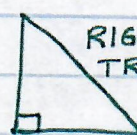
POLYGON: A CLOSED FIGURE FORMED BY 3 OR MORE LINE SEGMENTS



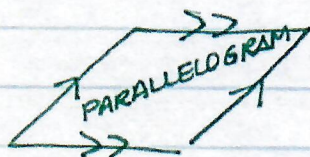
RECTANGLE



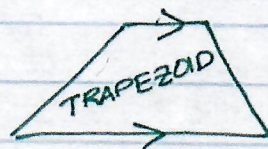
SQUARE



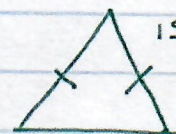
RIGHT TRIANGLES



PARALLELOGRAM



TRAPEZOID



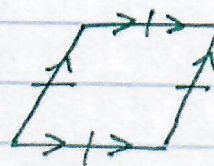
ISOSCELES TRIANGLE



PENTAGON



HEXAGON

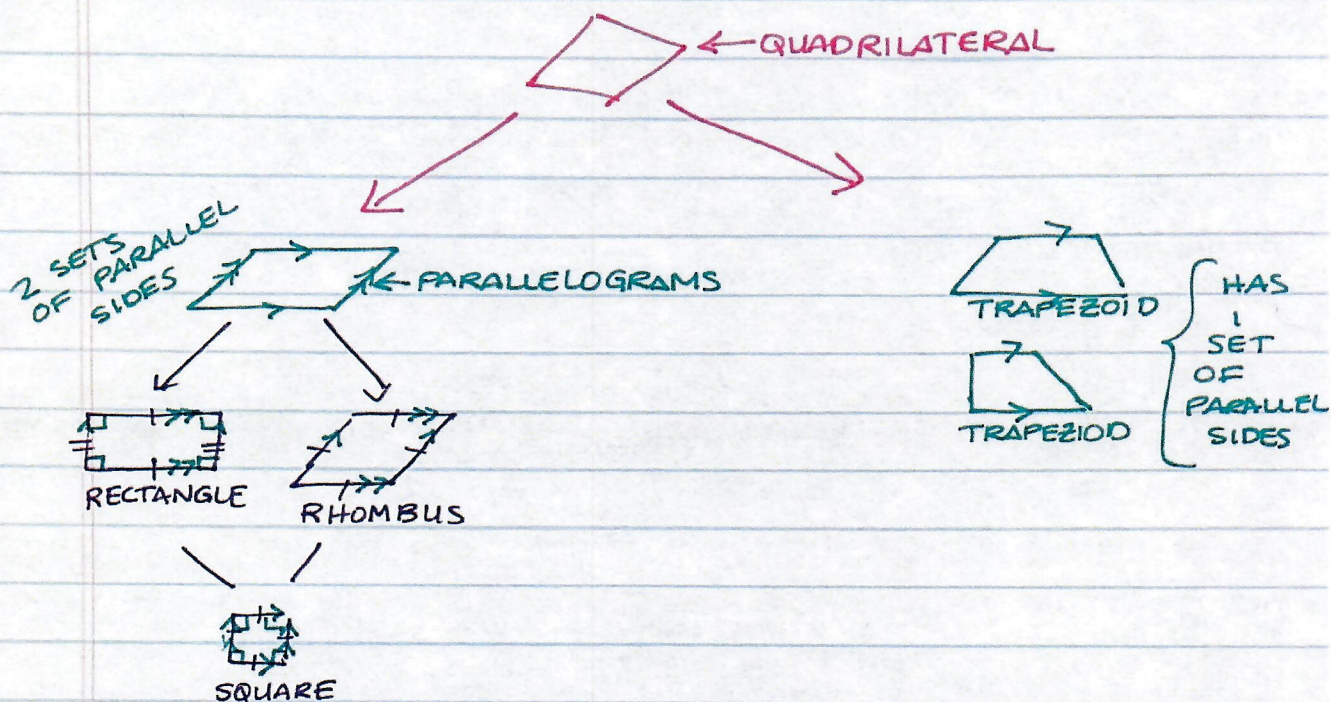


RHOMBUS

CLASSIFYING QUADRILATERALS

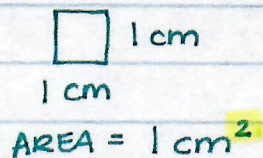
DEF

QUADRILATERAL: 4 SIDED POLYGON

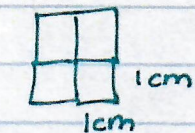


DEF

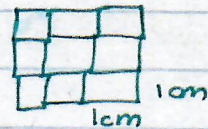
AREA: THE NUMBER OF SQUARE UNITS IT TAKES TO COVER A SURFACE



$$\text{AREA} = 1 \text{ cm}^2$$



$$\text{AREA} = 1 \text{ cm}^2$$



$$\text{AREA} = 9 \text{ cm}^2$$

Finding Area

	Parallelogram	Square	Rectangle	Triangle	Trapezoid
Picture of Shape					
Area Formula	$A = bh$ $A = lw$	$A = bh$ $A = s^2$	$A = bh$ $A = lw$	$A = \frac{1}{2}bh$ $A = \frac{bh}{2}$	$A = h \left(\frac{b_1 + b_2}{2} \right)$ <i>(Average of bases times height)</i>
Example	<p>b = <u>9</u> h = <u>2</u></p> <p>$A = bh$ $A = 9 \cdot 2$ $A = 18 \text{ in}^2$</p>	<p>b = <u>12</u> h = <u>12</u></p> <p>$A = bh$ $A = 12 \cdot 12$ $A = 144 \text{ ft}^2$</p>	<p>b = <u>9</u> h = <u>3.3</u></p> <p>$A = bh$ $A = 9(3.3)$ $A = 29.7 \text{ units}^2$</p>	<p>b = <u>7</u> h = <u>4</u></p> <p>$A = \frac{1}{2}bh$ $A = \frac{1}{2}(7)(4)$ $A = 14 \text{ m}^2$</p>	<p>b₁ = <u>4</u> b₂ = <u>2</u> h = <u>3</u></p> <p>$A = h \left(\frac{b_1 + b_2}{2} \right)$ $A = 3 \left(\frac{2+4}{2} \right)$ $A = 3 \left(\frac{6}{2} \right)$ $A = 3(3)$ $A = 9 \text{ units}^2$</p>
Example	<p>b = <u>7</u> h = <u>3</u></p> <p>$A = bh$ $A = 7 \cdot 3$ $A = 21 \text{ cm}^2$</p>	<p>b = <u>1.5</u> h = <u>1.5</u></p> <p>$A = bh$ $A = (1.5)(1.5)$ $A = 2.25 \text{ in}^2$</p>	<p>b = <u>2</u> h = <u>21</u></p> <p>$A = bh$ $A = 2 \cdot 21$ $A = 42 \text{ cm}^2$</p>	<p>b = <u>11</u> h = <u>5</u></p> <p>$A = \frac{1}{2}bh$ $A = \frac{1}{2}(5)(11)$ $A = \frac{1}{2}(55)$ $A = 27.5 \text{ in}^2$</p>	<p>b₁ = <u>14</u> b₂ = <u>8</u> h = <u>7</u></p> <p>$A = h \left(\frac{b_1 + b_2}{2} \right)$ $A = 7 \left(\frac{14+8}{2} \right)$ $A = 7 \left(\frac{22}{2} \right)$ $A = 7(11)$ $A = 77 \text{ cm}^2$</p>