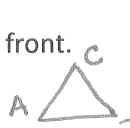
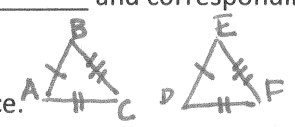
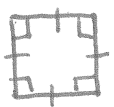


H. Geometry - Chapter 1 - Definition Sheet

Section 1.4

<p>Polygon</p>	<p>A polygon is a closed plane figure, formed by connecting <u>line segments</u> at their endpoints, with each segment intersecting <u>exactly</u> two others.</p>
<p>Parts of a polygon: Sides Vertices Angles</p>	<p><u>segments</u> forming polygons. <u>points</u> where sides intersect. Formed by 2 <u>intersecting</u> sides.</p>
<p>Diagonal</p>	<p>A line segment that connects two <u>non-consecutive</u> vertices.</p>
<p>Convex Polygons</p>	<p>Polygon in which no segment connecting any two vertices is <u>outside</u> the polygon.</p>
<p>Concave Polygons</p>	<p>The opposite of convex polygons.</p>
<p>Classifying Polygons</p>	<p>3 sides = <u>Triangle</u> 4 sides = <u>quadrilateral</u> 5 sides = <u>pentagon</u> 6 sides = <u>hexagon</u> 7 sides = <u>heptagon</u></p> <p>8 sides = <u>octagon</u> 9 sides = <u>nonagon</u> 10 sides = <u>decagon</u> 11 sides = <u>undecagon</u> 12 sides = <u>dodecagon</u></p> <p>n-sides = <u>n-gon</u> (17 sides = <u>17-gon</u>)</p>

H. Geometry - Chapter I - Definition Sheet

Special Parts of polygons:	
Consecutive Vertices	The endpoints of one side (<u>vertices next to each other</u>) (A, B / C, D)
Consecutive Sides	Sides sharing a common endpoint (<u>sides next to each other</u>) ($\overline{AB}, \overline{BC}$)
Consecutive Angles	Two angles that share a common side (<u>angles next to each other</u>) ($\angle B, \angle C$)
Naming a Specific Polygon	List by consecutive vertices, in order (<u>Pentagon CDEAB</u>)
Naming a Triangle	Use the \triangle symbol in front. <div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 20px;">  </div> <div style="margin-right: 20px;"> <p>EX:</p> <p>$\triangle CAB$</p> <p>$\triangle ACB$</p> <p>$\triangle BAC$</p> </div> <div> <p>many ways to name it)</p> </div> </div>
Congruent Polygons	<p>Polygons are congruent IFF corresponding sides are \cong and corresponding angles are \cong.</p> <p>Order of the vertices should show the correspondence.</p> <p>$\triangle ABC \cong \triangle DEF$</p> <div style="display: flex; justify-content: center; align-items: center;">  </div>
Perimeter of a polygon	The <u>sum</u> of the lengths of its sides.
Equilateral Polygon	All sides are <u>equal</u> in measure (all sides are <u>congruent \cong</u>).
Equiangular Polygon	All angles are <u>equal</u> in measure (all angles are <u>congruent \cong</u>).
Regular Polygon	<p>Has all <u>sides</u> equal in measure and all <u>angles</u> equal in measure. (It is <u>equilateral</u> and <u>equiangular</u>).</p> <div style="text-align: center; margin-top: 10px;">  </div>

