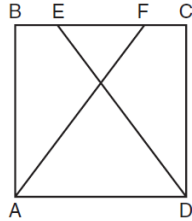


Name: _____
 Date: _____
 Class: _____

Geometry
 Review
 RP 1

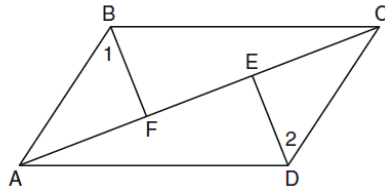
- 1) The diagram below shows square $ABCD$ where E and F are points on \overline{BC} such that $\overline{BE} \cong \overline{FC}$, and segments \overline{AF} and \overline{DE} are drawn.

Prove that $\overline{AF} \cong \overline{DE}$.



- 2) Given: Quadrilateral $ABCD$, diagonal \overline{AFEC} , $\overline{AE} \cong \overline{FC}$, $\overline{BF} \perp \overline{AC}$, $\overline{DE} \perp \overline{AC}$, $\angle 1 \cong \angle 2$

Prove: $ABCD$ is a parallelogram.



- 3) Given: Quadrilateral $ABCD$ has vertices $A(-5,6)$, $B(6,6)$, $C(8,-3)$, and $D(-3,-3)$.

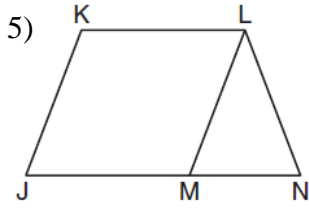
Prove: Quadrilateral $ABCD$ is a parallelogram but is neither a rhombus nor a rectangle.

- 4) Given: $\triangle ABC$ with vertices $A(-6,-2)$, $B(2,8)$, and $C(6,-2)$

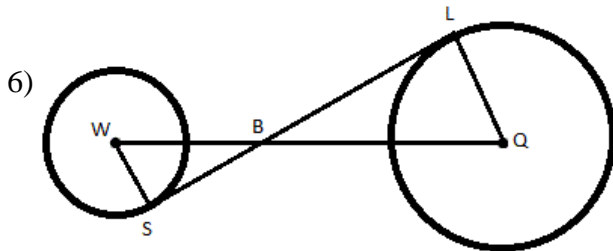
\overline{AB} has midpoint D , \overline{BC} has midpoint E , and \overline{AC} has midpoint F

Prove: $ADEF$ is a parallelogram

$ADEF$ is not a rhombus

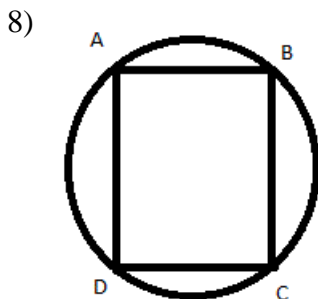


Given: $KLNJ$ is an isos trapezoid
 Triangle LMN is isos
 ($\angle L$ is vertex \angle)
 Prove: $\angle JKL \cong \angle LMJ$



Given: W and Q are center points of the circle
 Segment LS is tangent to both circles.
 Prove: $\triangle WSB \sim \triangle QLB$

7) Prove $ABCD$ is a rhombus if $A(2, 4)$, $B(6, 5)$, $C(5, 1)$, $D(1, 0)$. If you remove point A what type of triangle is triangle BCD (how do you know)?



Given: $\widehat{AB} \cong \widehat{DC}$
 $\widehat{BC} \cong \widehat{AD}$
 Diagonal AC is drawn
 Prove: $\triangle ACD \cong \triangle CAB$