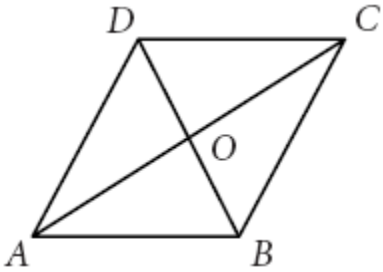
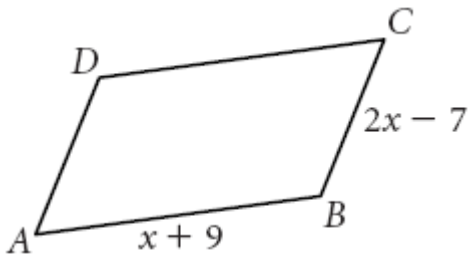
Name: _____

Parallelograms

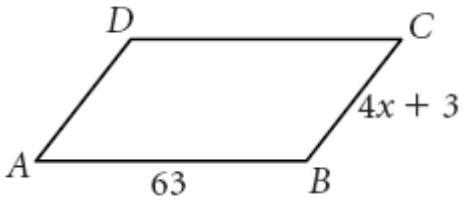
1) *ABCD* is a parallelogram. *If AO* = 11, and *BO* = 7. Find the measure of *AC* and BD



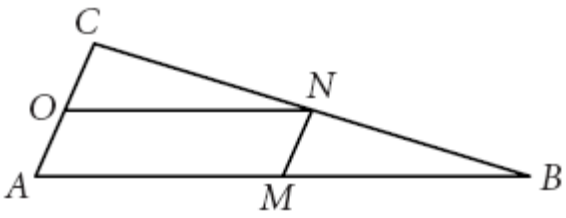
2) *ABCD* is a parallelogram. *If* Perimeter *ABCD* = 46.Find the measures of AB and BC



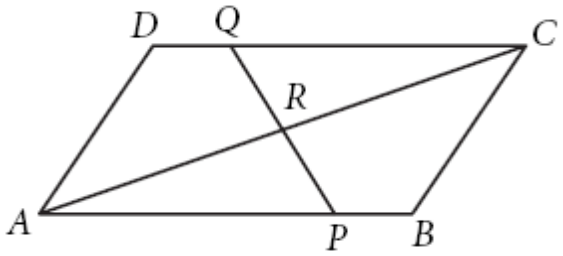
3) The perimeter of a parallelogram *ABCD* = 16*x* - 12. Find the measure of *AD*



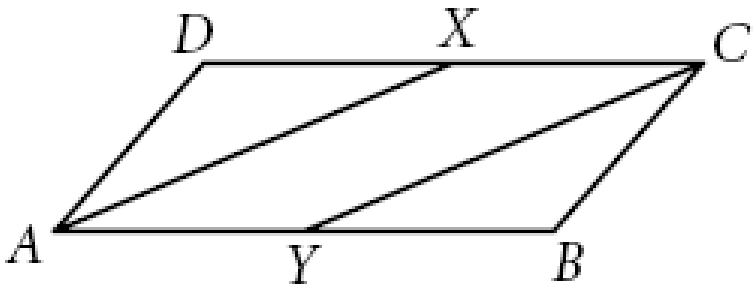
4) *M*, *N*, and *O* are midpoints. What type of quadrilateral is *AMNO*? How do you know? Write a proof showing that $\square ONC \cong \square MBN$



5) Given: *ABCD* is a parallelogram
$\overline{BP} \cong \overline{DQ}$
R is the point of intersection of $\overline{AC}$ and $\overline{PQ}$
Prove: $\overline{AC}$ and $\overline{PQ}$ bisect each other



6) Given: Parallelogram *ABCD* with angle bisectors $\overline{AX}$ and $\overline{CY}$
Prove: *AXCY* is a parallelogram



7) Given: Parallelogram *ABCD*, $\overline{BY} \perp \overline{AC}$, $\overline{DX} \perp \overline{AC}$
Show: $\overline{DX} \cong \overline{BY}$