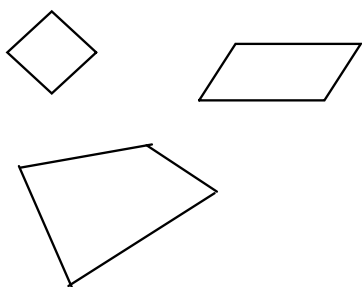


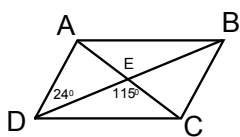
Modeling with parallelograms and quadrilaterals



When modeling with quadrilaterals and parallelograms you will be applying the properties you have learned to help you solve the problem.

With your shoulder partner summarize as many properties as you can that apply to quadrilaterals that are parallelograms

What property can help us solve for $\angle DAB$?



Find the measures of the angles of the quadrilateral.

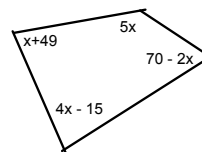
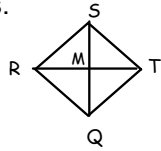


figure not to scale

The diagonals of square QRST intersect at point M. $MT = 4x - 5$ and $SQ = 6x + 15$. Find the length of the diagonals.



Coordinate geometry.

Given the coordinates of a quadrilateral use coordinate geometry to verify what type of parallelogram it is.

$$P(2, 3), R(1, -2), Y(-5, -7), Z(-4, -2)$$

with distance

with slope

with midpoints