Rectangle Diagonals
conjecture

Rhombus Diagonal
conjecture

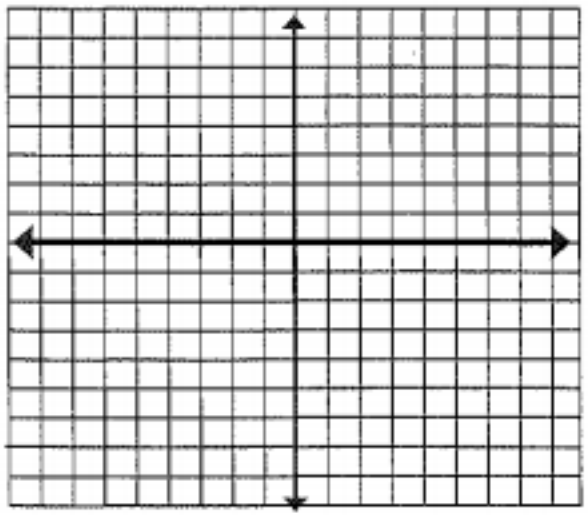
Square Diagonals
conjecture

Rhombus Angles
conjecture

Special Parallelograms

WXYZ is a rhombus.
$m\angle X = 24(10 - x)^\circ$
$m\angle Z = 6(x + 15)^\circ$
$m\angle Y = ?^\circ$

Given PQRS is a parallelogram, decide whether it is a rectangle, rhombus or square. Justify your answer using conjectures.
P(−2, 3), Q(−2, −4), R(2, −4), S(2, 3)



WXYZ is a rectangle with a perimeter of $\Delta XYZ = 24$.
$XY + YZ = 5x + 1$
$XZ = 13 - x$
$WY = ?$

WXYZ is a square.
$WX = 1 - 10x$
$YZ = 14 + 3x$
$XY = ?$