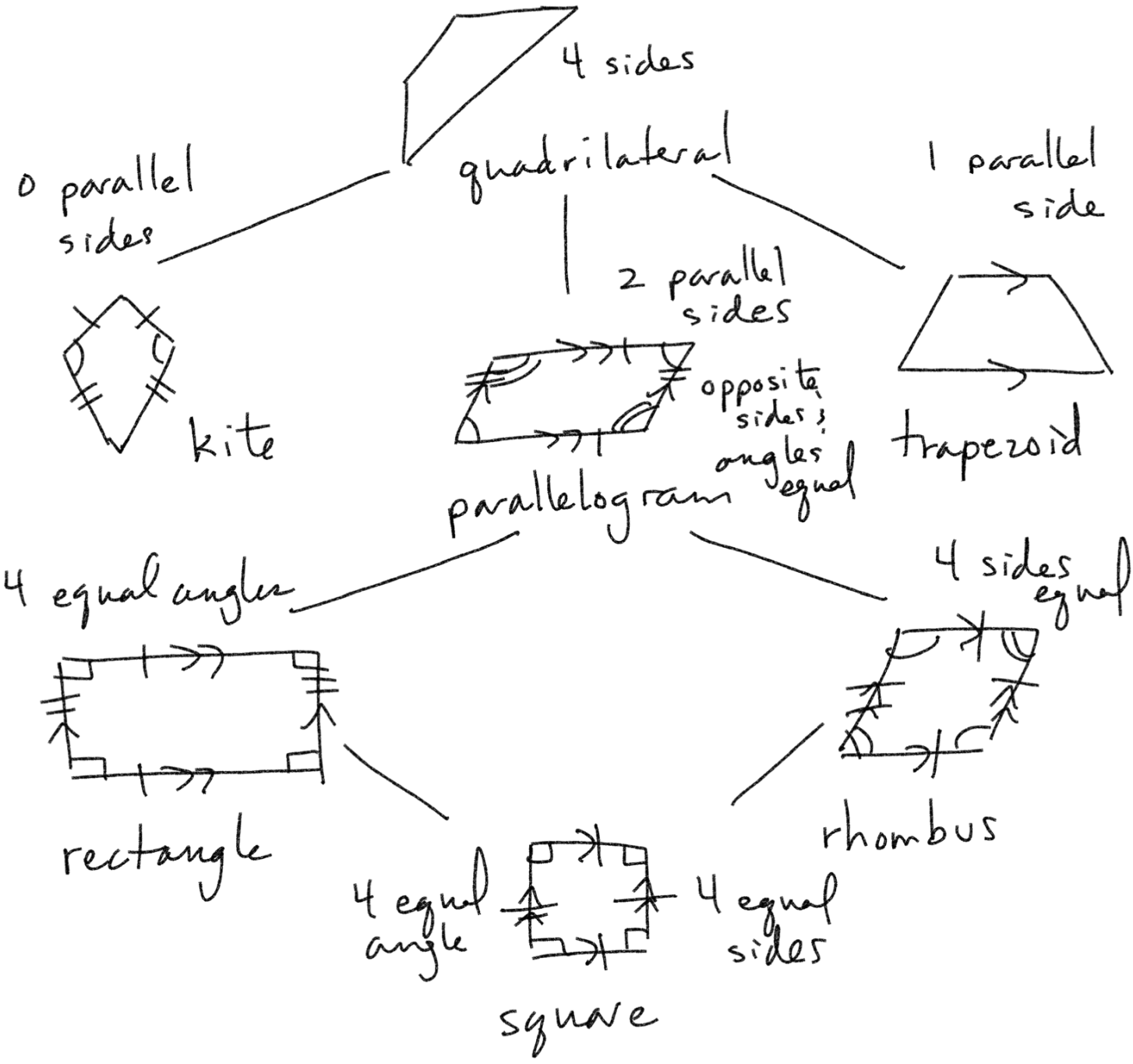
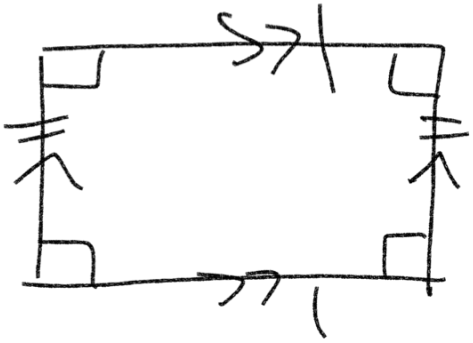
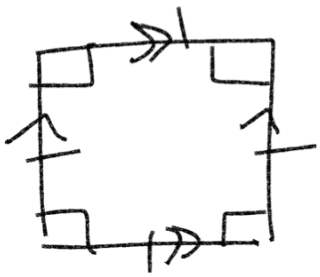
T-G Geometry Week 26 3/28





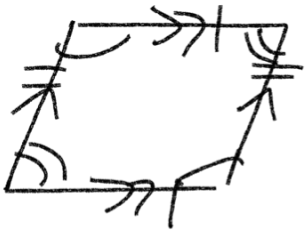
Rectangle
- quadrilateral ✓
- parallelogram ✓

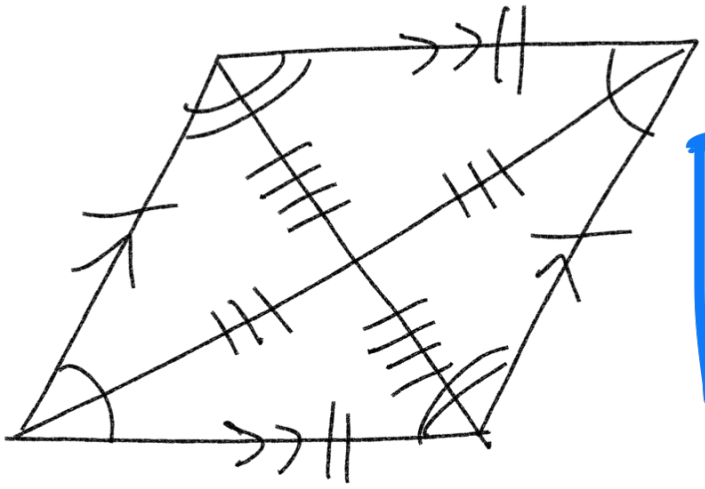
kite
- quadrilateral



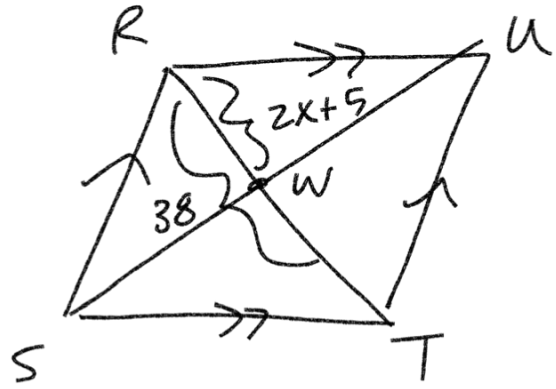
square
- quadrilateral
- parallelogram
- rectangle
- rhombus

Parallelogram





Diagonals are bisectors.



$\overline{TR} = 38$

$\overline{WR} = 2x + 5$

or $WR = \frac{1}{2}\overline{TR}$

$2\overline{WR} = \overline{TR}$

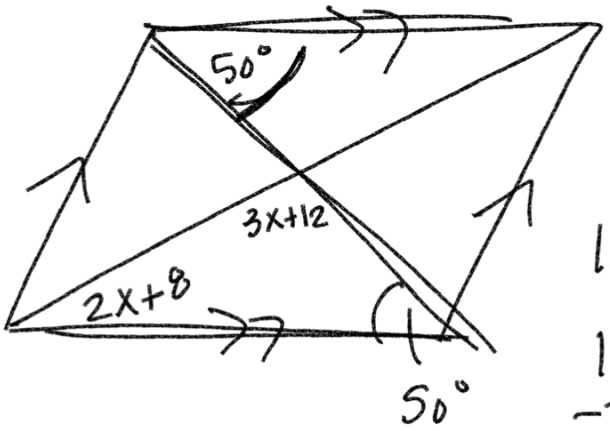
$2(2x+5) = 38$

$4x + 10 = 38$

$-10 \quad -10$

$\frac{4x}{4} = \frac{28}{4}$

$\boxed{x = 7}$



Alternate Interior Angles

$180° = 2x+8+3x+12+50$

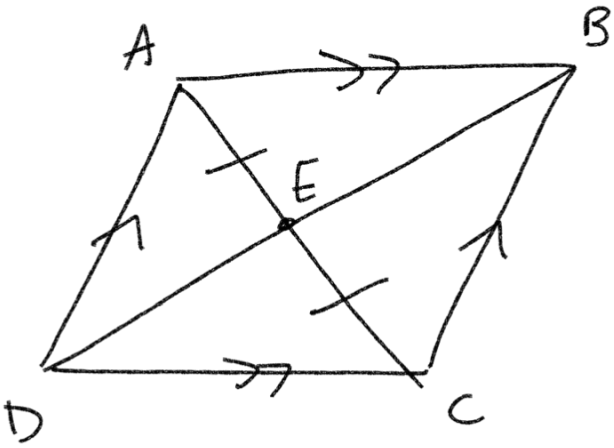
$180° = 5x + 70$

$-70 \quad -70$

$\frac{110}{5} = \frac{5x}{5}$

$\boxed{x = 22}$

1.)



$\overline{AE} = 3x+8$

$\overline{EC} = 5x+2$

$\overline{AE} = \overline{EC}$

$3x+8 = 5x+2$

$-3x \quad -3x$

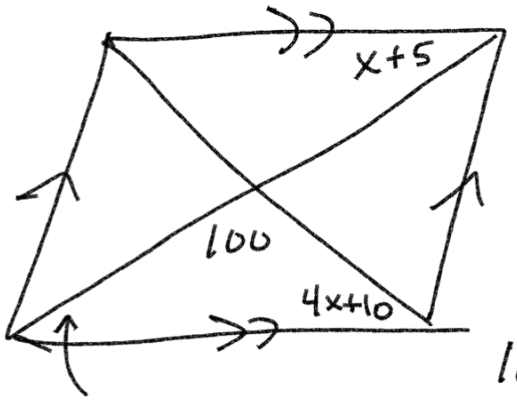
$8 = 2x+2$

$-2 \quad -2$

$\frac{6}{2} = \frac{2x}{2}$

$x = 3$

2.)



$180 = 100 + x+5 + 4x+10$

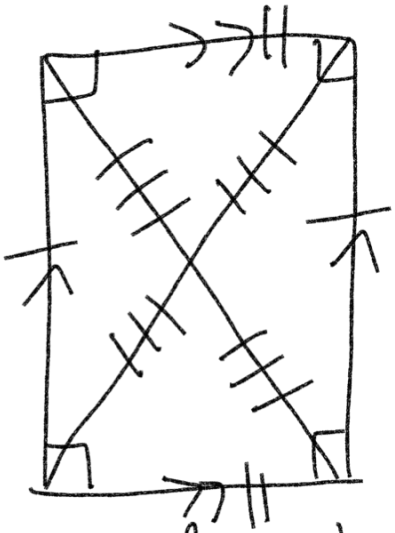
$180 = 5x + 115$

$-115 \quad -115$

$\frac{65}{5} = \frac{5x}{5}$

$x = 13$

Rectangle (is a parallelogram)

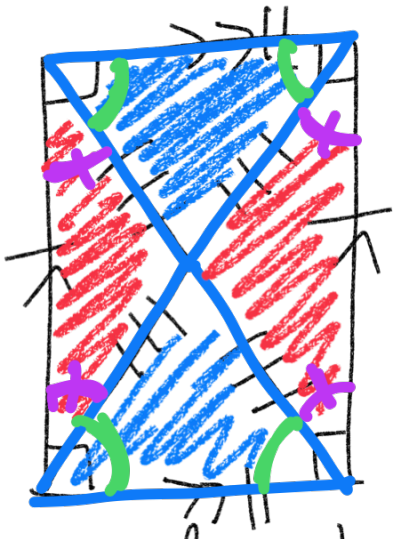


4 equal angles

Difference

All diagonals are congruent

Rectangle



4 equal angles

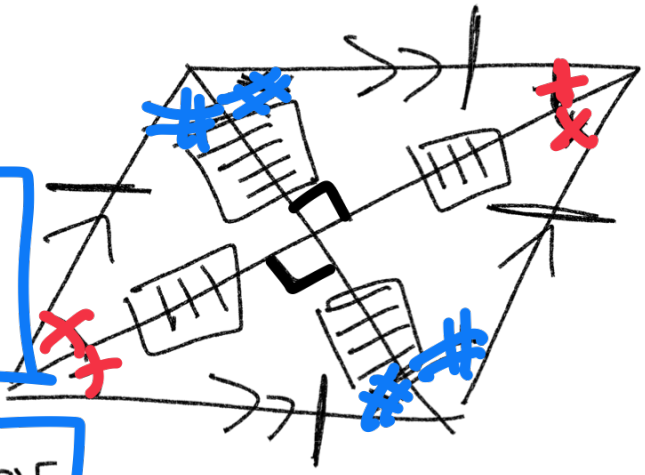
Triangle with equal legs
isosceles triangles

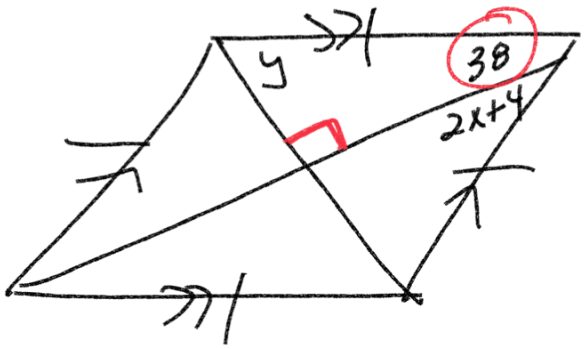
2 pairs of
isosceles triangles

Rhombus has
4 equal
sides

Rhombus

Diagonal
perpendicular
bisectors
also
angle bisector





$180 = 38 + 90 + y$

$180 = 128 + y$

$-128 \quad -128$

$52 = y$

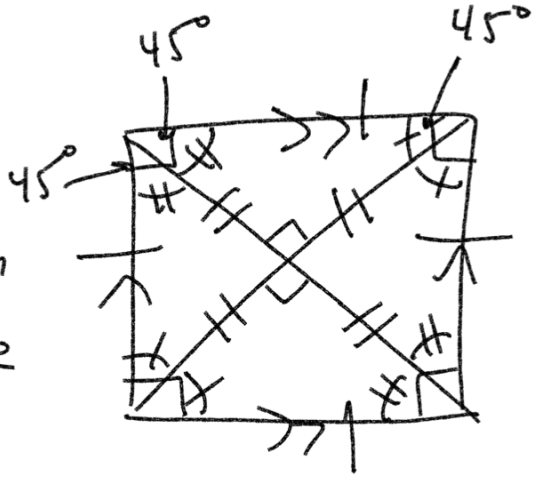
$2x + 4 = 38$

$-4 \quad -4$

$\frac{2x}{2} = \frac{34}{2}$

$x = 17$

Square



From parallelogram diagonals are bisectors

From rectangles
4 angles equal
diagonals are equal

From rhombus
4 sides equal
diagonals are perpendicular bisectors and angle bisectors