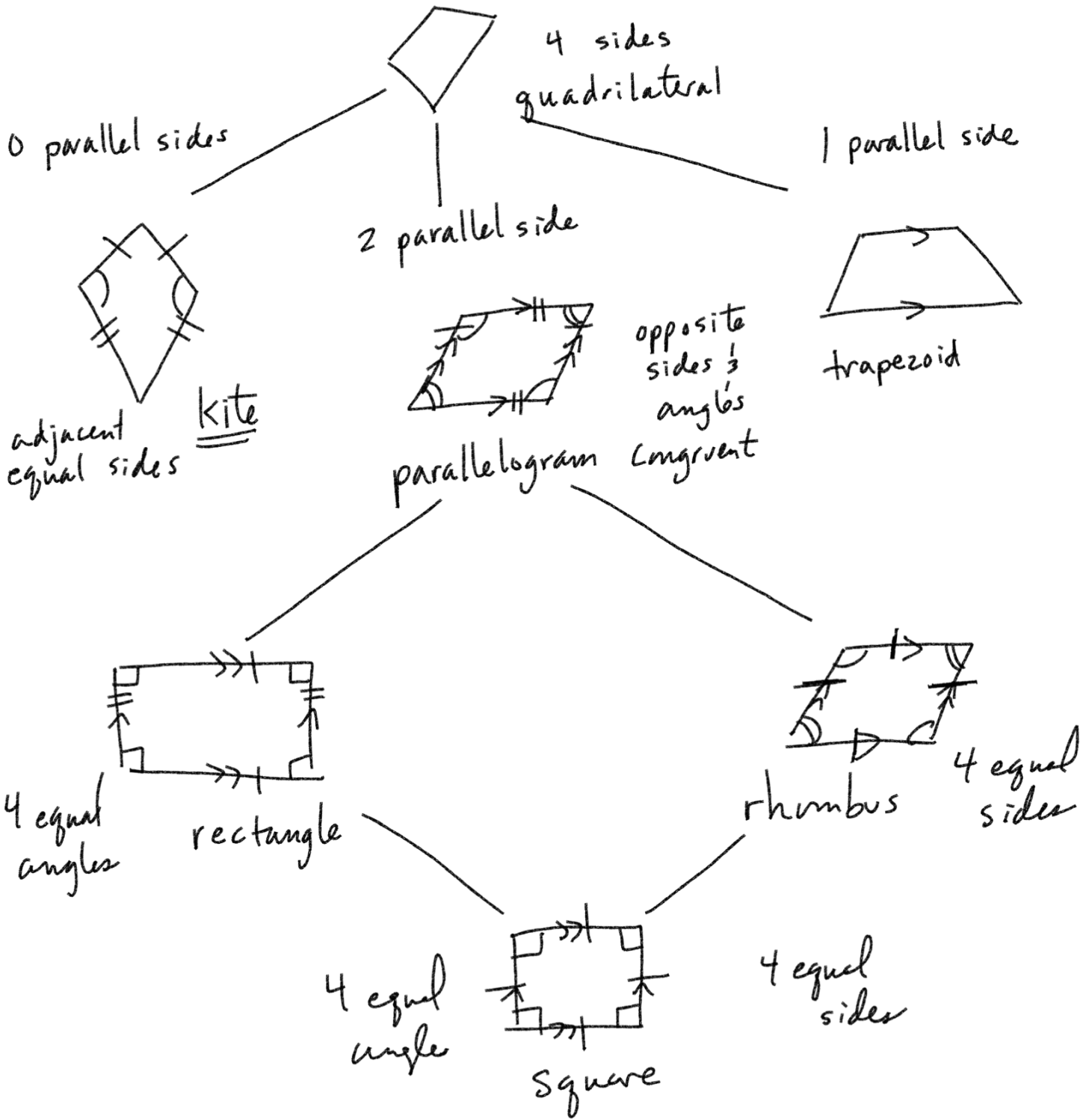
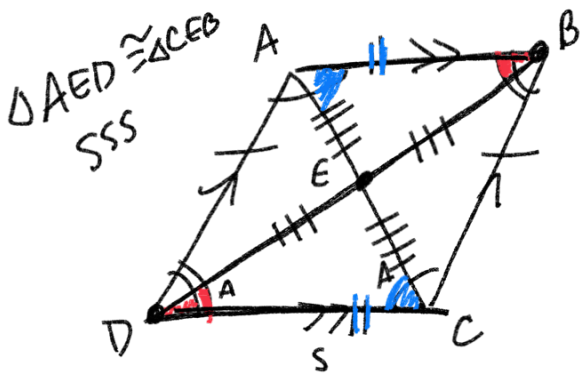
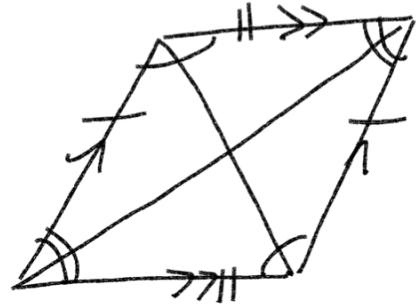
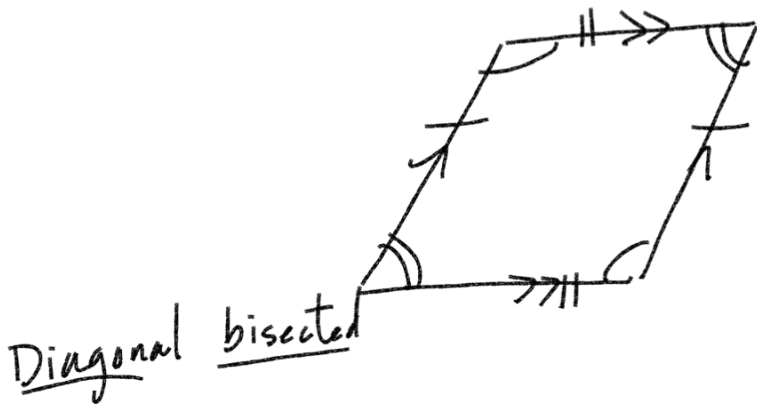


TH-6 Geometry Week 26



Parallelogram

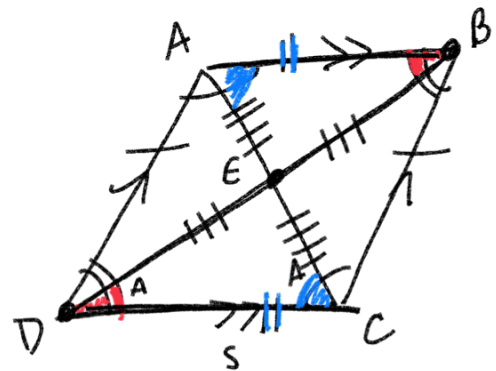


congruent - Alternate Interior Angles
congruent - Alternate Interior Angles

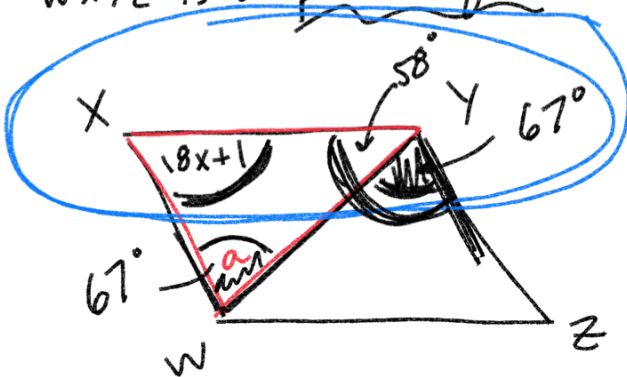
$$\triangle DEC \cong \triangle BEA$$

$$\overline{DE} \cong \overline{BE}$$

$$\overline{EC} \cong \overline{EA}$$



WXYZ is a parallelogram



$$18x + 1 + 58 + a = 180^\circ$$

$$18x + 1 + 58 + 67 = 180^\circ$$

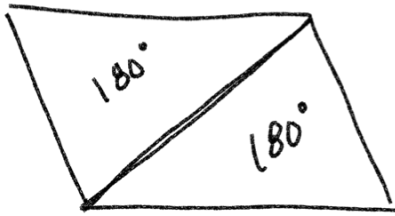
$$18x + 126 = 180$$

$$-126 \quad -126$$

$$\frac{18x}{18} = \frac{54}{18}$$

$$x = 3$$

Adjacent angles in a parallelogram are always supplemental ($=180^\circ$)

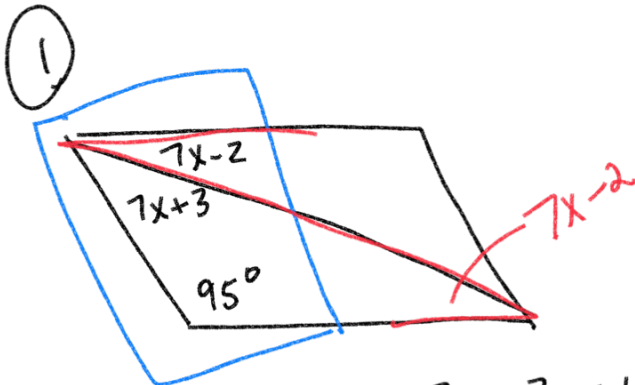


quadrilateral
interior angle measure
 $n=4$

$$(n-2)(180)$$

$$(4-2)(180)$$

$$2(180) = 360$$



$$95 + 7x + 3 + 7x - 2 = 180$$

$$14x + 96 = 180$$

$$\begin{array}{r} -96 \\ -96 \end{array}$$

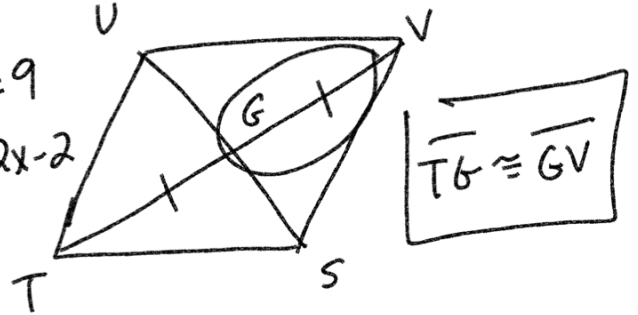
$$\frac{14x}{14} = \frac{84}{14}$$

$$x = 6$$

②

$$GV = 9$$

$$TV = 2x - 2$$



$$\overline{TV} \cong \overline{TG} + \overline{GV}$$

$$\overline{TV} \cong \overline{GV} + \overline{GV}$$

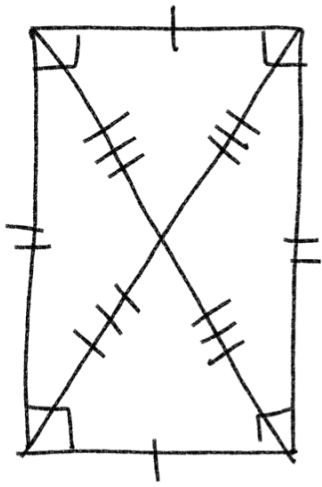
$$\overline{TV} = 2(\overline{GV})$$

$$2x - 2 = 2(9)$$

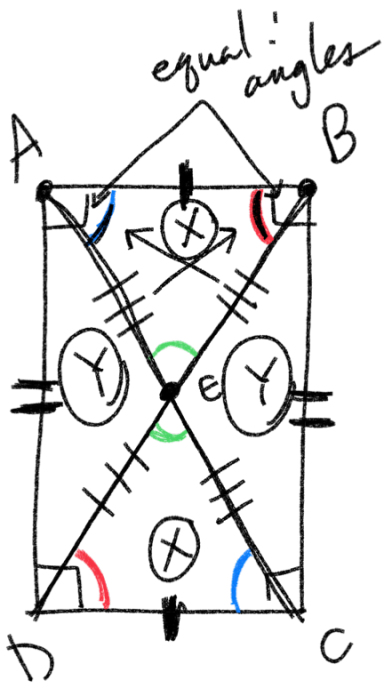
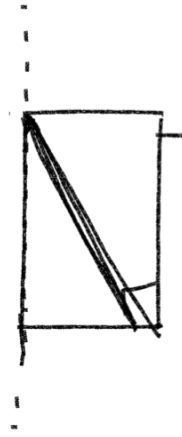
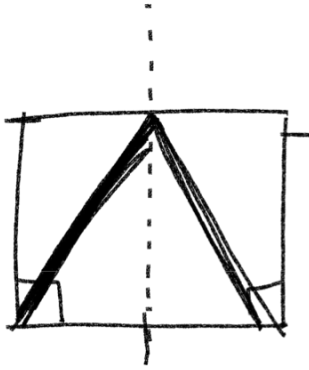
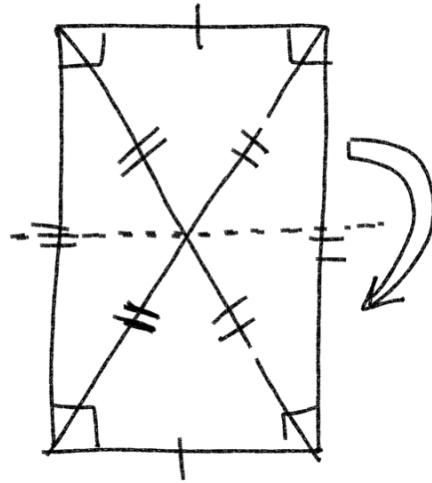
$$\begin{array}{r} 2x - 2 = 18 \\ +2 \quad +2 \end{array}$$

$$\frac{2x}{2} = \frac{20}{2}$$

$$x = 10$$



Rectangle All diagonals are congruent

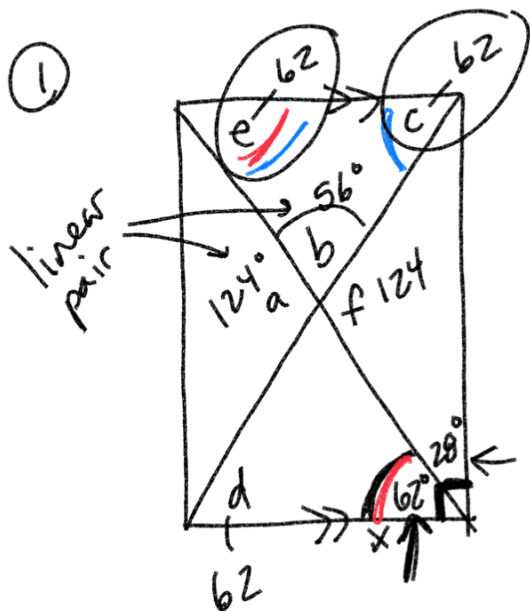


equal angles

vertical angles

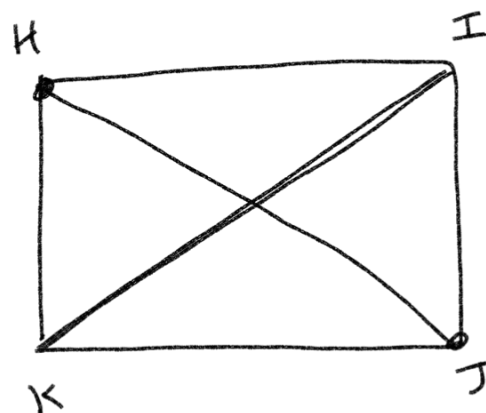
Triangle ABD
isosceles

2 pairs of isosceles triangles



$$\begin{aligned}
 a &= 124 \\
 b &= 56 \\
 c &= 62 \\
 d &= 62 \\
 e &= 62 \\
 f &= 124
 \end{aligned}$$

②



$$HJ = 3x + 7$$

$$IK = 6x - 11$$

$$\begin{aligned}
 3x + 7 &= 6x - 11 \\
 -3x & \quad -3x
 \end{aligned}$$

$$\begin{aligned}
 7 &= 3x - 11 \\
 +11 & \quad +11
 \end{aligned}$$

$$\frac{18}{3} = \frac{3x}{3} \quad \boxed{x = 6}$$

$$\begin{aligned}
 90^\circ &= 28^\circ + \underline{x} \\
 -28^\circ & \quad -28^\circ \\
 62 &= x
 \end{aligned}$$

$$62 + 62 + b = 180$$

$$124 + b = 180$$

$$-124 \quad -124$$

$$b = 56$$

HW

ch 6.3 evens

Online HW 26

Quiz 26

} April 22nd

HW/quiz 24 due tonight

HW/quiz 25 due April 15th



