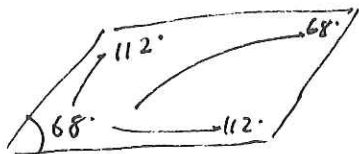


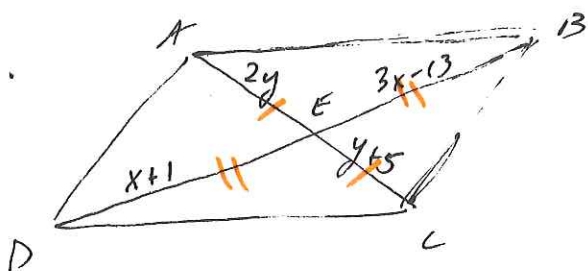
9.



68° and 112°

- opposite \angle 's \cong
- consecutive \angle 's supplementary

11.



Diagonals bisect each other!

• $2y = y + 5 \rightarrow \underline{y = 5}$

• $x + 1 = 3x - 13$

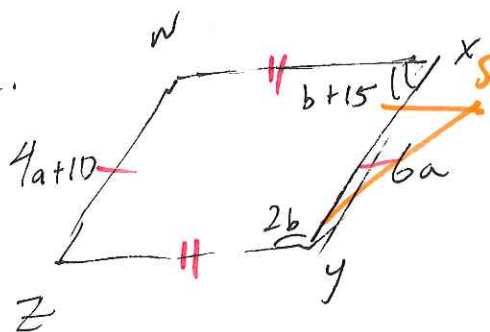
$1 = 2x - 13$

$14 = 2x$

$\underline{7 = x}$

\overline{AE}	: $2y \rightarrow 10$
\overline{EC}	: $y + 5 \rightarrow 10$
\overline{DE}	: $x + 1 \rightarrow 8$
\overline{EB}	: $3x - 13 \rightarrow 8$

12.



Supplementary (180°)

opp sides \cong
 $4a + 10 = 6c$

$10 = 2a$

$5 = a$

plug in

\overline{XY}	: $6a \rightarrow 30$
\overline{WZ}	: $4a + 10 \rightarrow 30$

$b + 15 + 2b = 180$

$3b + 15 = 180$

$3b = 165$

$b = 55$

plug in

$\angle W \cong \angle Y$

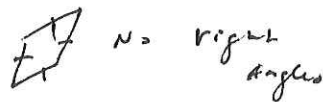
$\angle X \cong \angle Z$

$\angle X$: $b + 15 \rightarrow 70^\circ$
$\angle Z$: 70°
$\angle Y$: $2b \rightarrow 110^\circ$
$\angle W$: 110°

18.

a.) All squares are rectangles \rightarrow True.

b.) All rhombi are squares \rightarrow False.



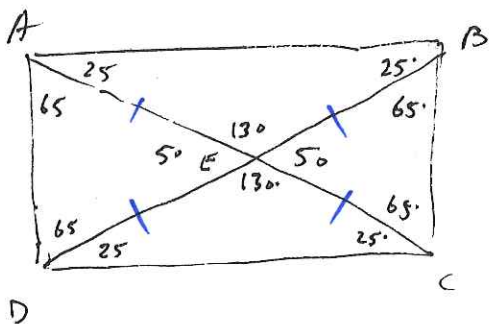
c.) All squares are parallelograms \rightarrow True

d.) Some squares are kites \rightarrow False.

kites need 2 distinct pair of \cong adjacent sides.

e.) No rhombuses are trapezoids \rightarrow True

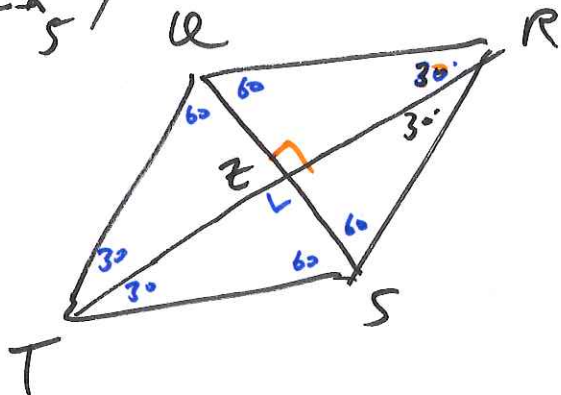
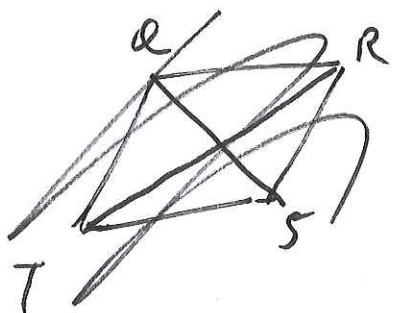
20.



- $\angle DAB : 90^\circ$
- $\angle ADC : 90^\circ$
- $\angle BDC : 25^\circ$
- $\angle BDA : 65^\circ$

- $\angle AEB : 130^\circ$
- $\angle BEC : 50^\circ$
- $\angle BCE : 65^\circ$

21.



- $\angle QSR : 60^\circ$
- $\angle QST : 60^\circ$
- $\angle QTS : 60^\circ$

- $\angle QTR : 90^\circ$
- $\angle QTS : 30^\circ$
- $\angle RTS : 90^\circ$