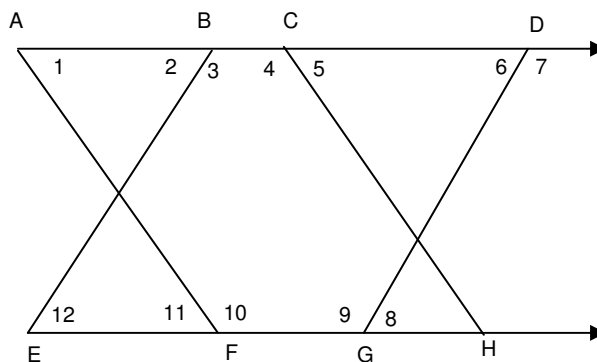


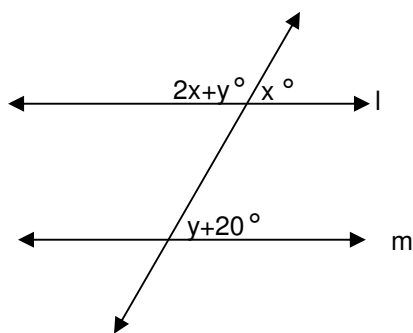
REVIEW SHEET

- 1) Refer to the figure at the right.
Name the lines which must be parallel.
Write "none" if applicable.



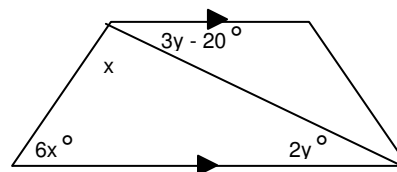
- a) $\angle 1 \cong \angle 11$ _____ e) $\angle 7 \cong \angle 11$ _____
 b) $\angle 2 \cong \angle 6$ _____ f) $\angle 6 \cong \angle 8$ _____
 c) $\angle 8 \cong \angle 5$ _____ g) $\angle 3 \cong \angle 4$ _____
 d) $\angle 8 \cong \angle 12$ _____ h) $\angle 1 + \angle 10 = 180$ _____

2)



$l \parallel m$ $x =$ _____
 $y =$ _____

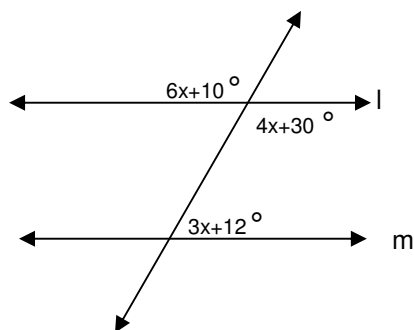
3)



$x =$ _____

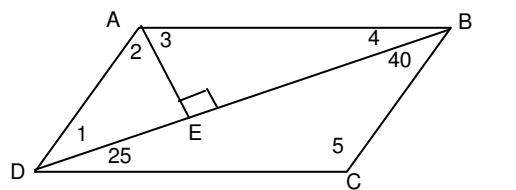
$y =$ _____

4)



Is $l \parallel m$? Why or why not?

5)



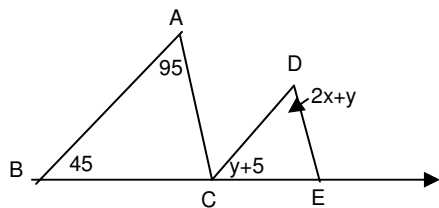
$\overline{AB} \parallel \overline{CD}$ $\overline{AD} \parallel \overline{BC}$ $\overline{AE} \perp \overline{DB}$

$\angle 1 =$ _____ $\angle 4 =$ _____

$\angle 2 =$ _____ $\angle 5 =$ _____

$\angle 3 =$ _____

6)

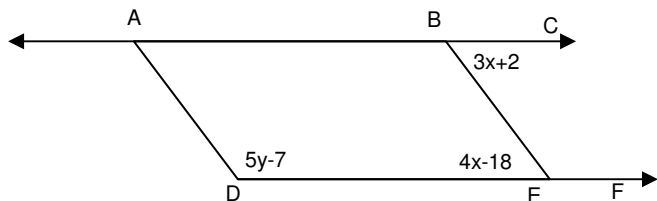


Find x, y so that
 $\overline{AB} \parallel \overline{CD}$, $\overline{AC} \parallel \overline{DE}$

$x =$ _____

$y =$ _____

7)



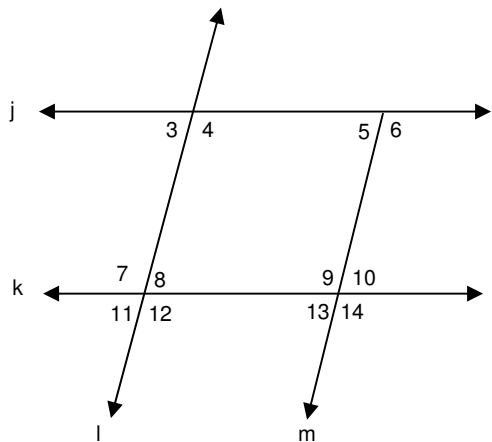
$x =$ _____

$y =$ _____

Find values that make $\overline{AC} \parallel \overline{DE}$ $\overline{AD} \parallel \overline{BE}$

PROOFS!!!!!!

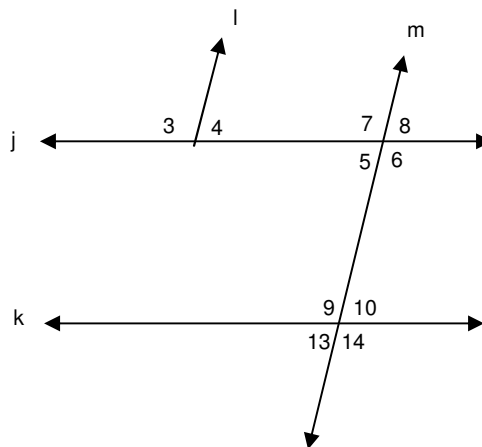
1)



Given: $j \parallel k$, $\angle 3 \cong \angle 10$

Prove: $l \parallel m$

2)

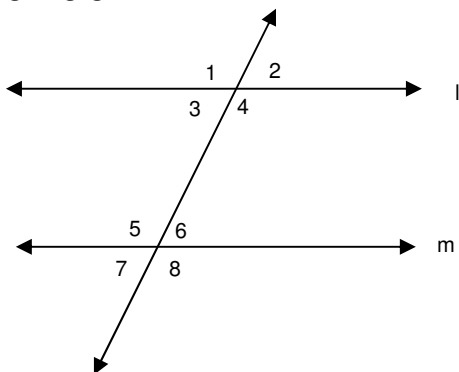


Given: $\angle 4$ and $\angle 9$ are supplementary

$j \parallel k$

Prove: $l \parallel m$

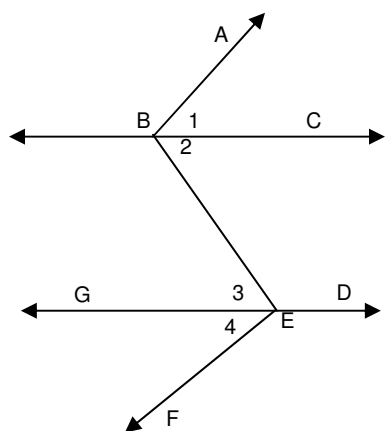
3)



Given: $\angle 1$ and $\angle 7$ are supplementary

Prove: $l \parallel m$

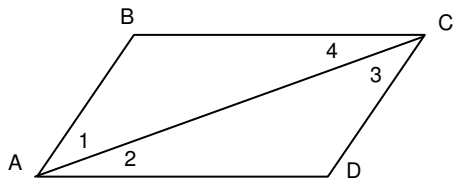
4)



Given: $\overline{AB} \parallel \overline{EF}$, $\angle 1 = \angle 4$

Prove: $\overline{BC} \parallel \overline{GE}$

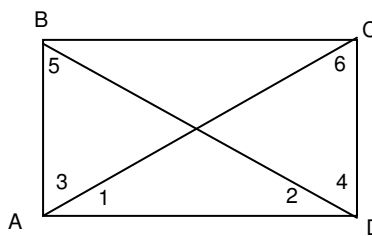
5)



Given: $\overline{AB} \parallel \overline{CD}$, $\overline{BC} \parallel \overline{AD}$

Prove: $\angle BAD \cong \angle BCD$

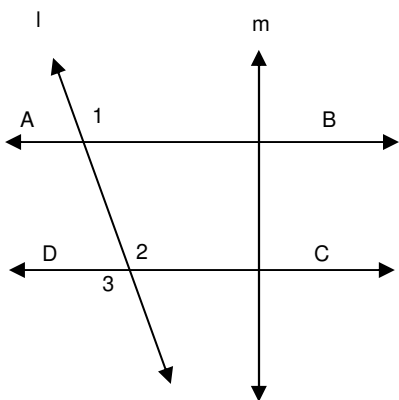
6)



Given: $\overline{BA} \perp \overline{AD}$, $\overline{CD} \perp \overline{AD}$, $\angle 1 \cong \angle 2$

Prove: $\angle 5 \cong \angle 6$

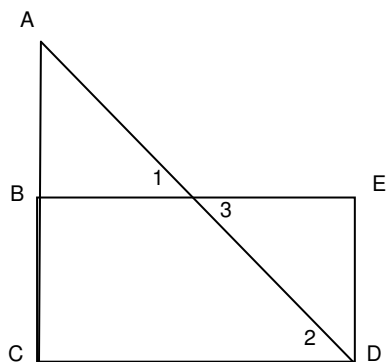
7)



Given: $\overline{AB} \perp \overline{m}$, $\overline{DC} \perp \overline{m}$

Prove: $\angle 1 \cong \angle 3$

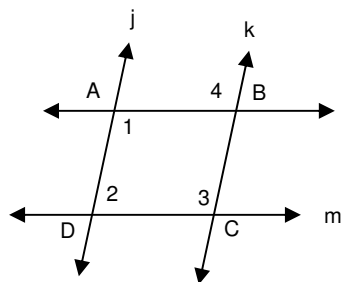
8)



Given: $\overline{BE} \perp \overline{AC}$, $\overline{ED} \perp \overline{BE}$, $\angle C \cong \angle E$

Prove: $\angle 1 \cong \angle 2$

9)



Given: $\angle 2$ supp $\angle 3$, $\angle 1 \cong \angle 3$

Prove: $\overline{AB} \parallel \overline{DC}$

Answers:

1.
a) AB $\parallel$ EF b) BE $\parallel$ DG C) None D) BE $\parallel$ DG E) None F) AD $\parallel$ EH

G) None H) AB $\parallel$ EF

2. $x = 50$ $y = 30$

3. $x = y = 20$

4. NO , not supp

5. 1=40

2=50

3=65

4=25

5=115

6. $x = 27.5$ $y = 40$

7. $x = 20$ $y = 25$

Proofs

1.

Given

PAIC

Transitive

CACP

2.

Given

PCAC

Def of Supp

Subst

Def of Supp

SSSP

3.

Given

VAT

Def of Supp

Subst

Def of Supp

SSSP

4 .

Given

PAIC

AAP

Subst

Subtract

AICP

5.

Given

PAIC

Add

AAP

Subst

6.

Given

EST

CAT

If 2 lines perp to same line they are parallel

PAIC

Transitive

7.

Given

2 lines perp to same line they are parallel

PCAC

VAT

Transitive

8.

Given

Def of perp

Transitive

Def of perp

2 lines perp to same line they are parallel

PCAC

9.

Given

Def of Supp

Subst

Def of Supp

SSSP