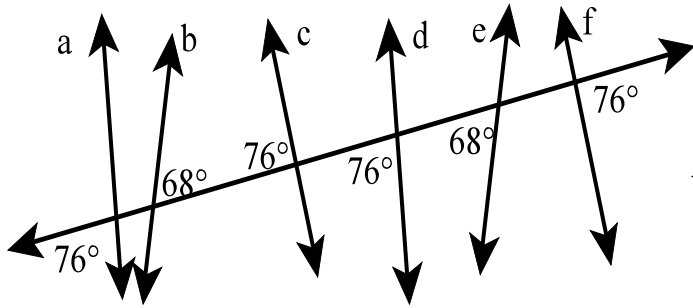


Parallel Lines and Transversals 2

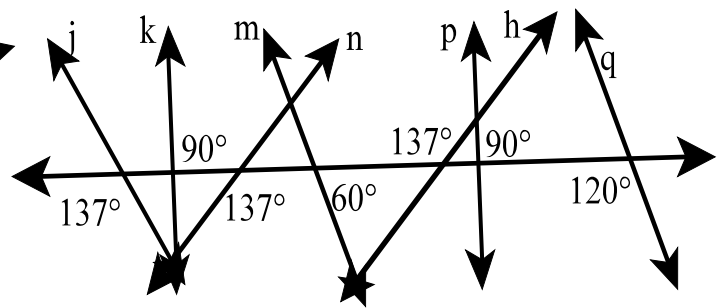
Geometry

Identify all pairs of parallel lines, and explain how we know they are parallel.

1)



2)



Use the information in each problem to tell whether any lines are parallel and, if they are, how we can tell.

3) $\angle 8 \cong \angle 2$

4) $\angle 5 \cong \angle 2$

5) $\angle 3 \cong \angle 7$

6) $\angle 4 \cong \angle 6$

7) $\angle 11 \cong \angle 19$

8) $\angle 10 \cong \angle 20$

9) $\angle 13 \cong \angle 16$

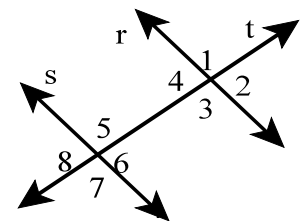
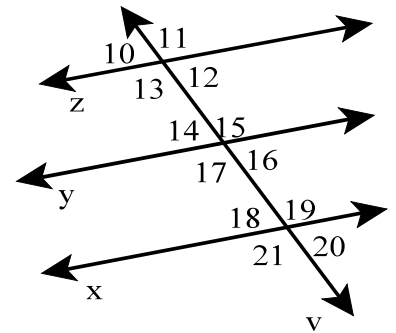
10) $\angle 15 \cong \angle 20$

11) $m\angle 17 + m\angle 18 = 180^\circ$

12) $\angle 15 \cong \angle 19$

13) $m\angle 12 + m\angle 15 = 180^\circ$

14) $\angle 14 \cong \angle 20$



In the figures to the right $a \parallel b$, $b \parallel c$, $a \parallel c$ and $d \parallel e$. The $m\angle 7 = 124^\circ$ and $m\angle 20 = 56^\circ$. Find the measure of the given angle, and explain how you found it.

15) $m\angle 23$

16) $m\angle 14$

17) $m\angle 24$

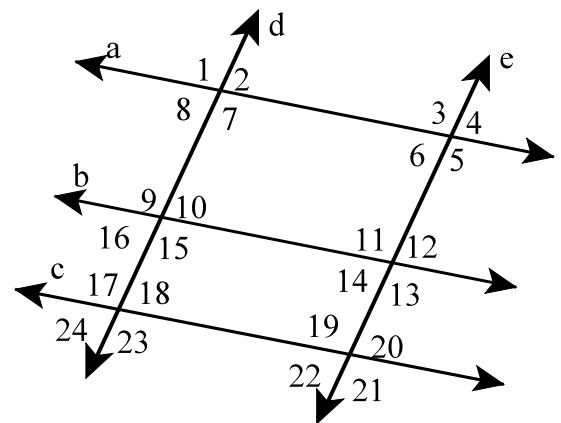
18) $m\angle 10$

19) $m\angle 1$

20) $m\angle 21$

21) $m\angle 4$

22) $m\angle 18$



Using the same figure find the measures of the following angles if $m\angle 16 = 68^\circ$ and $m\angle 5 = 112^\circ$. Explain each.

23) $m\angle 2$

24) $m\angle 14$

25) $m\angle 11$

26) $m\angle 20$

27) $m\angle 10$

28) $m\angle 13$

29) $m\angle 4$

30) $m\angle 21$