

Parallel Lines and Transversals

Geometry

In the figures to the right $a \parallel b$, $c \parallel d$, and $e \parallel f$. Given that $m\angle 22 = 115^\circ$ and $m\angle 5 = 80^\circ$, find the measure of the given angle, and explain how you found it.

1) $m\angle 3$

2) $m\angle 9$

3) $m\angle 26$

4) $m\angle 25$

5) $m\angle 7$

6) $m\angle 24$

7) $m\angle 11$

8) $m\angle 1$

9) $m\angle 8$

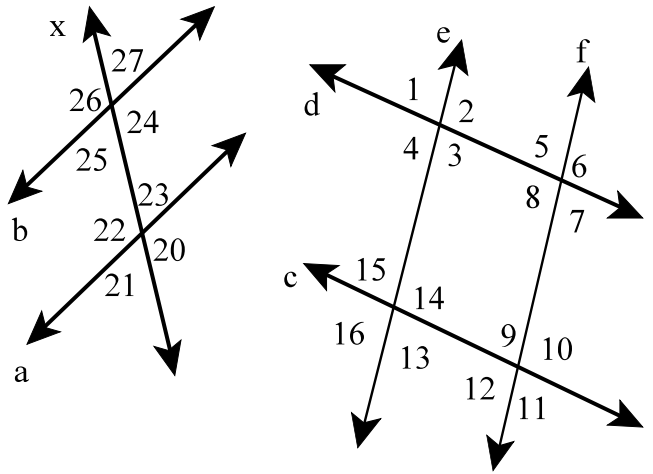
10) $m\angle 20$

11) $m\angle 27$

12) $m\angle 15$

13) $m\angle 13$

14) $m\angle 16$



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

15) $\angle 1 \cong \angle 7$

16) $\angle 4 \cong \angle 8$

17) $\angle 3 \cong \angle 5$

18) $\angle 1 \cong \angle 6$

19) $\angle 13 \cong \angle 15$

20) $\angle 15 \cong \angle 18$

21) $m\angle 13 + m\angle 14 = 180^\circ$

22) $\angle 10 \cong \angle 21$

23) $\angle 11 \cong \angle 19$

24) $\angle 20 \cong \angle 17$

25) $\angle 4 \cong \angle 5$

26) $\angle 18 \cong \angle 13$

