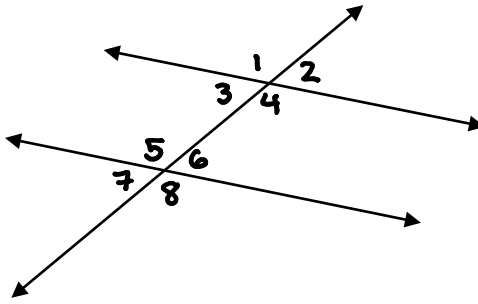


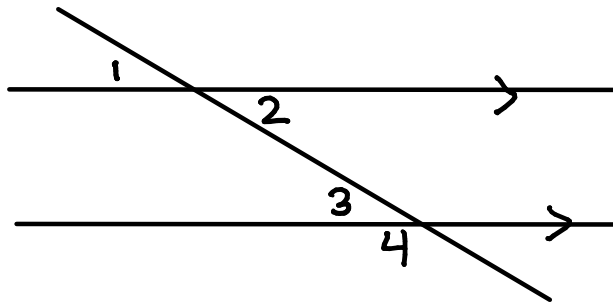
Learning Goal 1.3: Parallel Lines and Transversals



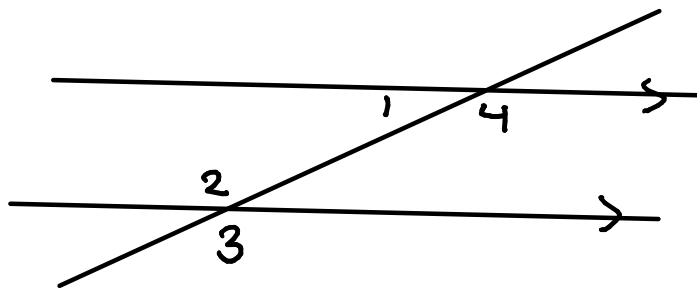
Determine if the following statements are true or false based on the diagram above. If they are false, change them to be true!

- 1) $\angle 1$ and $\angle 4$ are congruent _____
- 2) $\angle 3$ and $\angle 5$ are congruent _____
- 3) $\angle 5$ and $\angle 7$ are supplementary _____
- 4) If $\angle 4 = 130^\circ$ then $\angle 5 = 130^\circ$ _____
- 5) $\angle 2$ and $\angle 6$ are alternate interior angles _____
- 6) $\angle 6$ and $\angle 7$ are vertical angles _____
- 7) $\angle 1$ and $\angle 8$ will sum up to 180° _____

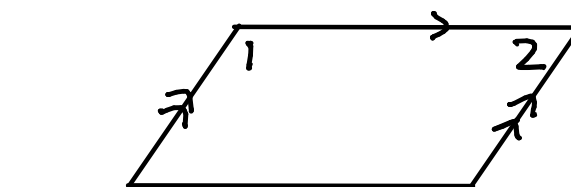
- 8) $m\angle 1 = 3x - 17^\circ$
 $m\angle 2 = x + 1^\circ$
 $x =$ _____



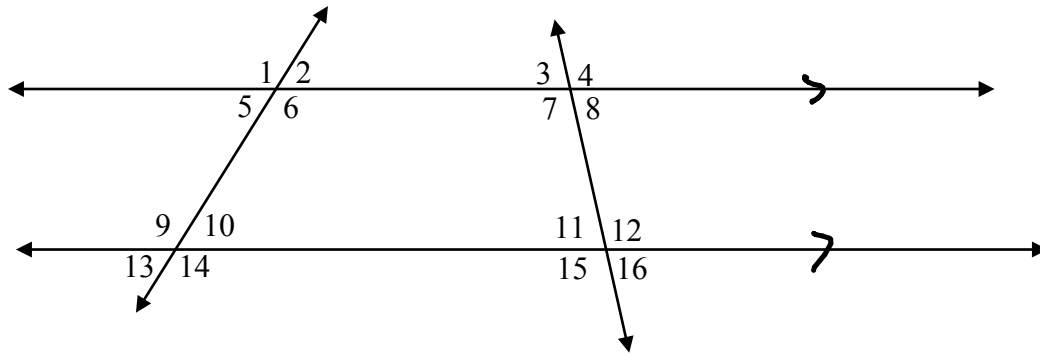
- 9) $m\angle 3 = 20k + 11^\circ$
 $m\angle 4 = 8k + 1^\circ$
 $k =$ _____



- 10) $m\angle 1 = 95^\circ + 7h$
 $m\angle 2 = 55^\circ - h$
 $h =$ _____
- 11) $m\angle 3 = 5k + 12^\circ$
 $m\angle 4 = 7k - 16^\circ$
 $k =$ _____



- 12) $m\angle 1 = 2x$
 $m\angle 2 = 4x - 30$
 Find the value of $x =$ _____



Let $m\angle 1 = 115^\circ$ and $m\angle 12 = 110^\circ$

13. $m\angle 9 =$ _____	14. $m\angle 4 =$ _____
15. $m\angle 10 =$ _____	16. $m\angle 11 =$ _____
17. $m\angle 8 =$ _____	18. $m\angle 5 =$ _____
19. $m\angle 3 =$ _____	20. $m\angle 14 =$ _____

Refer to the above figure and identify the special angle pair name.

21) $\angle 7$ and $\angle 4$ _____

22) $\angle 6$ and $\angle 14$ _____

23) $\angle 13$ and $\angle 5$ _____

24) $\angle 7$ and $\angle 11$ _____

25) $\angle 4$ and $\angle 8$ _____