



Practice

3.3 Parallel Lines and Transversals

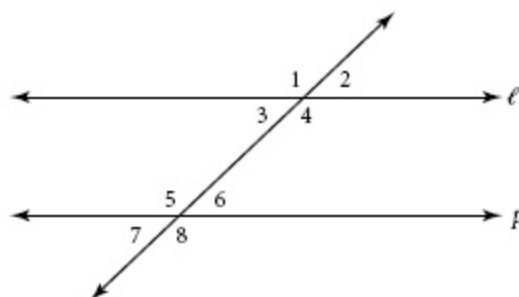
In the figure at right, lines ℓ and p are parallel.

1. List all the angles that are congruent to $\angle 1$.

2. List all the angles that are congruent to $\angle 2$.

3. If $m\angle 1 = 115^\circ$, find the measure of each angle in the figure.

4. If $m\angle 3 = (3x)^\circ$ and $m\angle 7 = (4x - 24)^\circ$, find the measure of each angle in the figure.



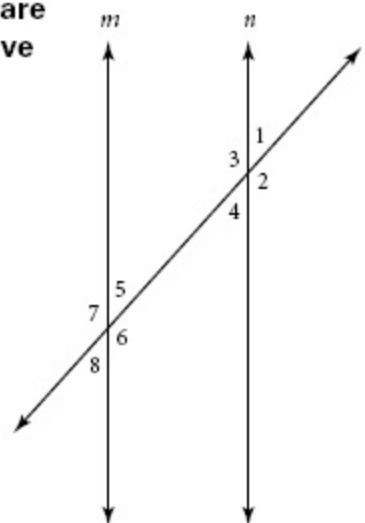
For Exercises 5–8, refer to the diagram below. Lines m and n are parallel. Name all angles congruent to the given angle, and give the theorems or postulates that justify your answer.

5. $\angle 6$ _____

6. $\angle 8$ _____

7. $\angle 5$ _____

8. $\angle 7$ _____



In $\triangle KLM$, $\overline{NO} \parallel \overline{ML}$ and $\angle KNO \cong \angle KON$. Find the indicated angle measures.

9. $m\angle KNO$ _____ 10. $m\angle KON$ _____

11. $m\angle NOL$ _____ 12. $m\angle LNO$ _____

13. $m\angle MNL$ _____ 14. $m\angle KLN$ _____

