

What you will learn about:
Parallel lines and Angles

Supplementary Angles

2 angles whose measure add up to 180°

Complementary Angles

2 angles whose measures add up to 90°

Vertical Angles

Non-Adjacent angles formed by intersecting lines

Linear Pairs

Adjacent angles that are supplementary

Parallel Lines

lines in the same plane that do not intersect

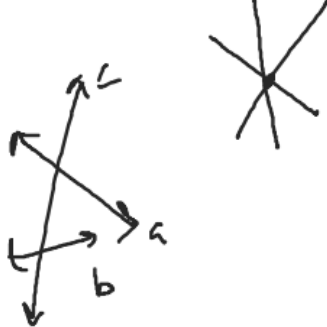
Transversal

line that intersects 2 or more lines at

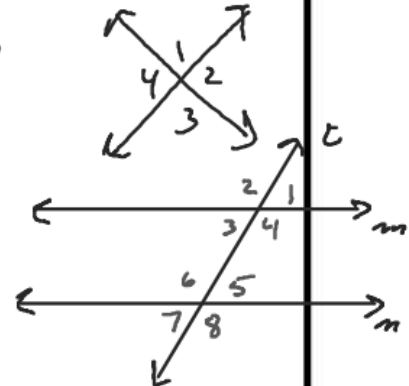
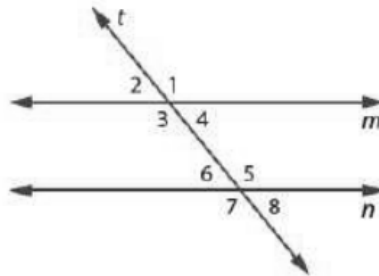
different points

Congruent

Same measure



In the diagram below $m \parallel n$ with transversal t .



- In the preceding diagram, the angles at each point of intersection are numbered so that they can be easily identified.

- What pairs of angles, if any appear to be equal in measure?

2,4 4,8 6,8 4,6
1,7 5,7 1,5 3,5
1,3 2,6 2,8 3,7

- What angle pairs appear to be supplementary? (Supplementary angles need not be linear pairs.)

3,6 4,5 1,8 1,6
2,5 2,7 4,7 3,8

- Draw another pair of parallel lines and a transversal with a different slope from the one above. Number the angles as in the figure above.

- Do the same pairs of numbered angles appear to be equal in measure? *yes*

- Do the same pairs of numbered angles appear to be supplementary? *yes*