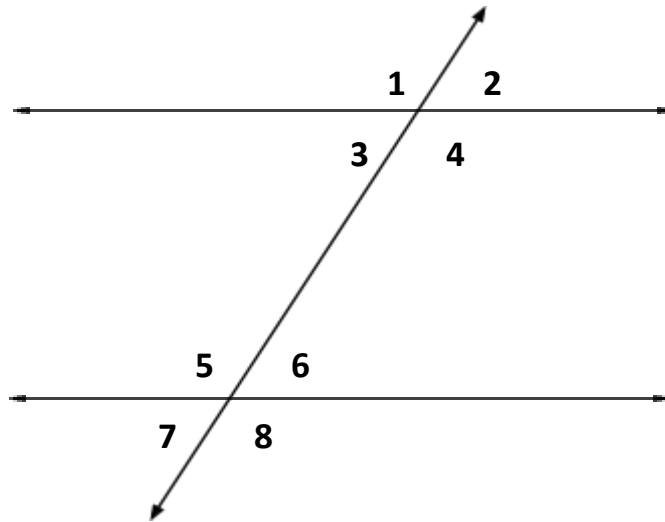


2-1 Lines, transversals and angles

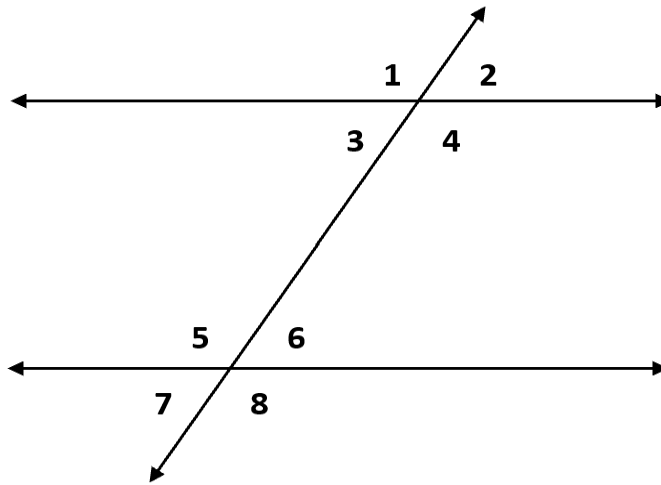
Use the following diagram to answer questions:



- 1) The corresponding angle to $\angle 1 =$ _____
- 2) The corresponding angle to $\angle 4 =$ _____
- 3) The alternate interior (AI) to $\angle 6 =$ _____
- 4) The alternate interior (AI) to $\angle 5 =$ _____
- 5) The alternate exterior (AE) to $\angle 1 =$ _____
- 6) The alternate exterior (AE) to $\angle 2 =$ _____
- 7) The same side interior (SSI) to $\angle 3 =$ _____
- 8) The same side interior (SSI) to $\angle 4 =$ _____
- 9) The same side exterior (SSE) to $\angle 1 =$ _____
- 10) The same side exterior (SSE) to $\angle 2 =$ _____
- 11) The vertical angle to $\angle 5 =$ _____
- 12) The linear pair with $\angle 4 =$ _____

2-1 Lines, transversals and angles

Use the following diagram of two parallel lines with a transversal to answer questions 13-17:



- 13) If $\angle 1 = x - 15$ and $\angle 5 = 120^\circ$, solve for x
- 14) If $\angle 4 = 3x + 4$ and $\angle 5 = 2x + 44$, what is the measure of $\angle 4$?
- 15) If $\angle 1 = 4x + 5$ and $\angle 7 = 2x + 25$, what is the measure of $\angle 7$?
- 16) If $\angle 3 = 5x + 10$ and $\angle 8 = 2x - 40$, what is the measure of $\angle 3$?
- 17) If $\angle 5 = 4x + 5$ and $\angle 6 = 3x + 35$, what is the measure of $\angle 5$?