

Which choice best describes the following statement?

It rained the past three days, so Jim concludes it will rain today as well.

- a. Inductive reasoning
- b. Deductive reasoning

Name the property that the statement illustrates.

$$\overline{CD} \cong \overline{CD}$$

- a. Transitive Property of Segment Congruence
- b. Symmetric Property of Segment Congruence
- c. Reflexive Property of Segment Congruence

Name the property that the statement illustrates.

If $\angle B \cong \angle C$ and $\angle C \cong \angle D$, then $\angle B \cong \angle D$.

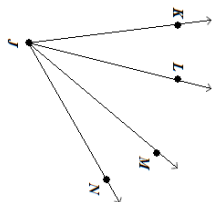
- a. Transitive Property of Angle Congruence
- b. Symmetric Property of Angle Congruence
- c. Reflexive Property of Angle Congruence

Name the property that the statement illustrates.

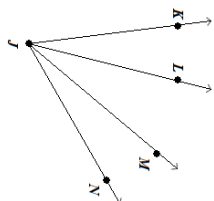
If $\overline{EP} \cong \overline{BE}$, then $\overline{BE} \cong \overline{EP}$.

- a. Symmetric Property of Segment Congruence
- b. Reflexive Property of Segment Congruence
- c. Transitive Property of Segment Congruence

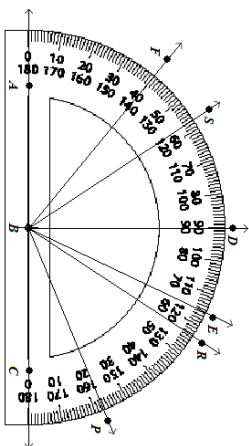
In the diagram, $\angle KJL \cong \angle NJM$, $m\angle KJM = (4x + 31)^\circ$, $m\angle NJL = (3x + 34)^\circ$, and $m\angle LJM = 6^\circ$. Find $m\angle NJM$.



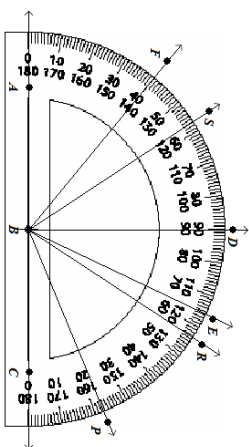
In the diagram, $\angle KJL \cong \angle NJM$, $m\angle KJM = (x + 39)^\circ$, $m\angle NJL = (7x + 3)^\circ$, and $m\angle LJM = 10^\circ$. Find $m\angle KJL$.



Find the measure of $\angle SDE$. Then classify the angle.



Find the measure of $\angle DBR$. Then classify the angle.



Solve $2x + 12 = 6$. Justify each step.

Solve $-5x - 2 = -27$. Justify each step.