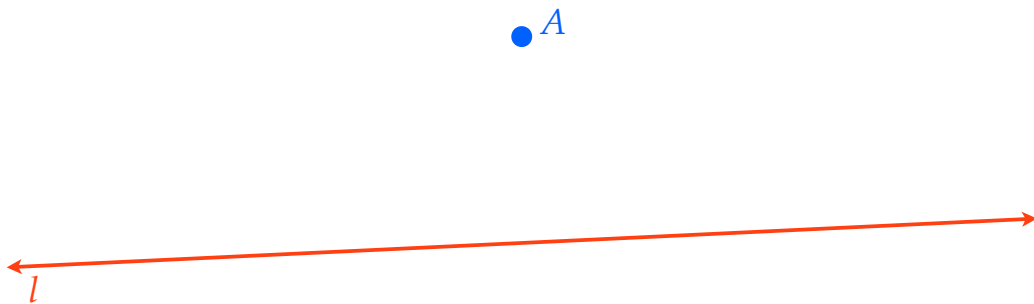


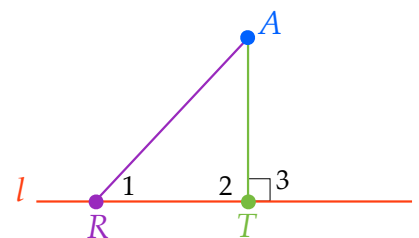
Given **Line l ...** and **Point A** , not on **Line l ...**
the shortest distance between **Line l** and **Point A** , is the length of the
perpendicular segment from **Point A** to **Line l** .



Statements	Reasons

\overline{AR} is any segment
from A to l , not \overline{AT}

Prove: $AR > AT$



The shortest distance between a **Line** and a **Point**, not on the **line**, is the length of the **segment perpendicular** to the **line** from the **point**.

Given **Line l** ... and **Point A** , not on **Line l** ...
the shortest distance between **Line l** and **Point A** , is the length of the **perpendicular segment** from **Point A** to **Line l** .

