**Supplementary Activity**

**Unit 4 Investigation 4**

**Parallel Lines Proportionality Theorem.**

Open the file: <http://tube.geogebra.org/material/simple/id/3108761>

Interact with the applet, then answer these questions.

1. What conclusion can you draw after sliding the first slider?
2. What conclusion can you draw after sliding the second slider?
3. What can you conclude about the ratio $\frac{DE}{EF}$?
4. Prove your result in (3) using the Side Splitter Theorem.
5. State the result as a theorem: If three parallel lines are cut by two transversals then

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