

# Tracing Geometry Worked Problems: A Simple Strategy to Enhance Learning

Students show enhanced learning when—in the course of study or independent work— they are encouraged to trace the relevant figures on worked geometry examples (Hu, Ginns, & Bobis, 2015).


## Procedure

1. The instructor creates worked-problem examples for geometry that pose a question or task, then sequentially demonstrate the step(s) for solution.
2. In the worked-example, the instructor identifies any point at which the student is directed to study, review, consider, or analyze one or more figures or elements of figures. At each of these points, the instructor inserts a prompt directing the student to *trace* the relevant figures/figure elements.

Figure 1 provides a simple worked-problem example that includes a trace prompt.

Figure 1: Sample Worked-Geometry Problem with Tracing Prompt

Review these 3 triangles. Trace each triangle with your finger.



Which is the *equilateral* triangle?

**Answer:** Triangle A is the equilateral triangle, as all sides are equal.

3. If the student reviews the worked-problem examples as in-class work, the instructor ensures that the learner successfully follows each tracing prompt. If the examples are given as homework, the student is trusted to independently complete tracing activities.

## Reference

Hu, F., Ginns, P., & Bobis, J. (2015). Getting the point: Tracing worked examples enhances learning. *Learning and Instruction*, 35, 85-93.