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Illustrative Mathematics.

# Handout

Surfacing Student Thinking to Assess for Understanding

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- Today, I am being trained on Core Curriculum then Illustrative Mathematics.
- PD Specialist: Initial of First Name then click on (NAME)



#### Part 1:

Directions: Use the space below to record your thoughts after each read.

Read 1: What do you notice?

**Read 2:** Identify examples of independent, collaborative, and unsurfaced thinking.

**Read 3:** Identify what prompted each of your previous examples.

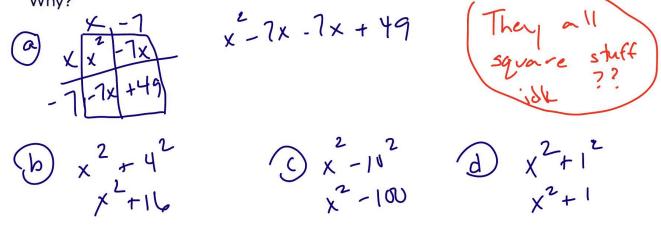




## **Part 2: Signs of Student Thinking**

Directions: Look at the student work sample to answer the questions below.

- 1) Apply the distributive property to each expression.
  - a) (x-7)(x-7)
  - b)  $(x+4)^2$
  - c)  $(x-10)^2$
  - d)  $(x+1)^2$
- 2) Look at your results. Each of these expressions is called a *perfect square trinomial*. Why?



What do you think the student understands?	How do you know?





## **Part 2: Monitoring through Targeted Questions**

**Directions:** Review the chart of monitoring questions and, based on the student work sample, select three questions to ask. For each, explain the insights you'd expect to gain. Then, choose **one question** that wouldn't be helpful and explain why.



What is this problem about?

Question	What insight do you expect to gain?
Question	Why wouldn't it be effective?
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## Part 3: Let's Plan to Surface Student Thinking

**Directions:** Select an activity from the next lesson you'll teach. Review the lesson's goals and teaching notes to anticipate possible student responses. Using this information, plan targeted questions to surface and assess student thinking as they engage with the activity.

Lesson:	Activity:
What is the purpose of the activity?	What types of student problem-solving are you looking to notice?
Expected Student Response	Questions to Surface Thinking



