Teaching Lab

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Co-Craft Questions Note-catcher

What to Expect

This video will…

- Introduce the Math Language Routine (MLR) Co-Craft Questions
- Model Co-Craft Questions
- Offer a guide to the routine
- Connect to resources for future inquiry and practice

This video is most effective when…

- Paused at critical reflection points
- Paired with the guide and note catcher
- Experienced with a coach or colleague
- Viewed multiple times as you grow

Apply

Take notes on the routine. What is the facilitator doing?

Two Pools

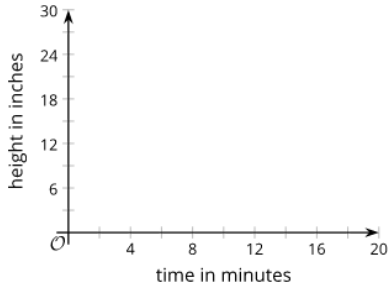
To prepare for a backyard party, a parent uses two identical hoses to fill a small pool that is 15 inches deep and a large pool that is 27 inches wide.

The height of the water in each pool is a function of time since the water is turned on.

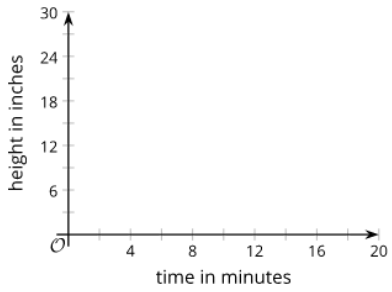
Here are descriptions of three situations. For each situation, sketch the graphs of the two functions on the same coordinate plane, so that is the height of the water in the small pool after minutes, and is the height of the water in the large pool after minutes.

In both functions, the height of the water is measured in inches.

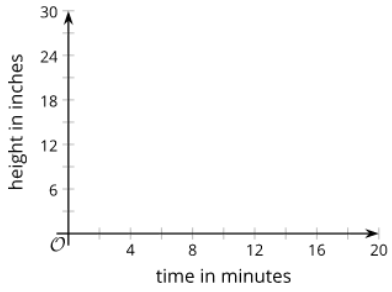
Situation 1: Each hose fills one pool at a constant rate. When the small pool is full, the water for that hose is shut off. The other hose keeps filling the larger pool until it is full.



Situation 2: Each hose fills one pool at a constant rate. When the small pool is full, both hoses are shut off.



Situation 3: Each hose fills one pool at a constant rate. When the small pool is full, both hoses are used to fill the large pool until it is full.



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Check Your Understanding

Summarize Co-Craft Questions as a series of four steps.

During the routine, what are the teacher and students thinking about?

Teacher	Students

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Co-Craft Questions

Cultivating Conversation

Create opportunities for student-to-student interaction in multiple ways that scaffold how they make meaning of the mathematical context.

Conversations make learning more authentic and emphasize mathematical language development.

Maximizing Meta-Awareness

Facilitate opportunities for students to think about their own thinking and language use.

Support students to use and refine their mathematical language during conversation to be better understood and to access the mathematical thinking of their peers.

Check Your Understanding

Is the goal of Co-Craft Questions to solve a mathematical task?

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Plan

Co-Craft Questions

Identify a RAISE task for the routine.

Plan to apply the routine.

Steps:

1. Hook
2. Students Write Questions
3. Students Compare Questions
4. Actual Question(s) Revealed

Optimize the routine.

Extend the routine.

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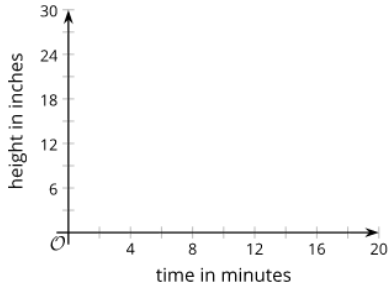

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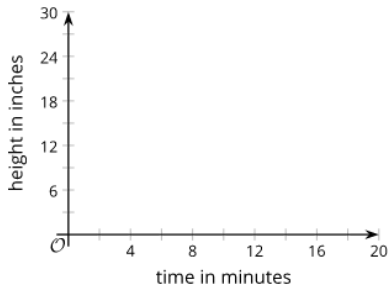

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