Strategy: Make sense of a problem by focusing on what you DO know.
Find a way to organize your information with drawings, tables, numbers and equations.

Math Tips for Olivia’s Management Challenge

Olivia needs to advise management on the best option for producing chocolate caramels. Can changing the conveyor belt speed by one second really make a difference? What should she do?

Try to determine what the problem is asking and how you might find an entry point to start.

AN ORDER HAS BEEN PLACED FOR
6,000 Fresh Caramels

Remember! Each row has 7 caramels. Rows of seven caramels can drop off the conveyor belt every three seconds OR every four seconds. Which option is better? Why?

Cindy thinks about how each hour has 60 minutes and each minute has 60 seconds. Her goal is to produce close to 6,000 caramels in one hour. How might we help her make the best choice between her two options?

Strategies:
Drawing it out and recording important numbers might help you enter this problem.

Try to focus on the parts you DO UNDERSTAND, rather than the parts you don’t understand yet.

Reread (or rewatch) the video and think about what matters for this problem. Record your thinking with words, pictures and numbers.
Strategy: Make sense of a problem by focusing on what you DO know.
Find a way to organize your information with drawings, tables, numbers and equations.

Analyze this student’s thinking and determine what’s on track.
He starts with what he knows about the problem and finds a way to organize his thinking.

Diagrams and pictures can show information that can help us find patterns.
With Olivia’s first option students must determine the correlation between how many chocolatey caramels drop off the conveyor belt every three seconds and how that information relates to the time limit of producing confections for an entire hour.

It's good to grapple with the hard stuff - that's what grows our brains!

What might this student do next? What's on track and what still needs attention?

PDF worksheets to are available at https://www.neuronmediaprojects.com/resources.html

Before you check your thinking by looking at the answers, try solving the problem yourself first!

<table>
<thead>
<tr>
<th>Option A -drop off caramels every 3 seconds</th>
<th>Option B -drop off caramels every 4 seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,400 caramels would be produced in 1 hr.*</td>
<td>6,300 caramels would be produced in 1 hour</td>
</tr>
</tbody>
</table>

In order to maximize profit and minimize waste, which option would you advise?
What’s your proof? *Equations were left out of the answer keys on purpose, so that all learners can have the opportunity to prove their thinking, rather than relying on the internet for solutions.