

ACTIVITY IA6.5: Jumping Back from a Decuple with Mini Ten-frames

Intended learning: To subtract the numbers 1–9 from a decuple without counting.

Instructional mode: Longer, inquiry mode for individuals or small groups.

⑤ **Materials:** Mini ten-frames, a large screen.

Description: The purpose of this activity is for students to apply knowledge of partitions of ten to subtraction from a decuple. This activity is best introduced once students have developed automaticity with partitions of ten.

Briefly display a collection of seven mini ten-frames. Screen the collection so that students can no longer see the mini ten-frames (see Figure 6.7). *How many dots do we have?* Once the student has determined the number of dots, screen three dots on the last frame. *I have covered three dots with a small card. How many dots will you be able to see if I remove this large screen? How do you know?* Remove large screen to enable students to check. Repeat with $80-2$; $50-8$; $40-6$, etc.

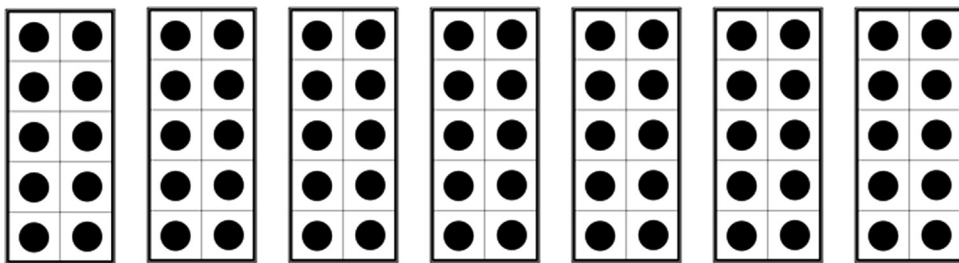


Figure 6.7 Jumping back from a decuple with ten-frames 10-dot cards for $70-3$

Responses, variations and extensions:

- Initially students might count back by ones to find each difference. If students continue with this strategy, present tasks with one ten-frame only. For example, $10-3$. This enables students to link partitioning tens with subtraction in higher decades.
- This task is typically more difficult for students than adding to a decuple.
- ⑤ • This activity can be done using dot strips rather than mini ten-frames.
- The activity can be extended into the hundreds.