Lesson 10: Problem Solving With Perimeter and Area

- Let's solve problems involving perimeter and area.

Warm-up: True or False: Divide in Parts

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $60 \div 6 = 10$

- $72 \div 6 = (60 \div 6) + (12 \div 6)$

- $78 \div 6 = (60 \div 10) + (18 \div 6)$

- $96 \div 8 = (80 \div 8) - (16 \div 8)$

10.1: Rope Off the Garden

Andre wants to know how much rope is needed to enclose the new rectangular school garden. The length of the garden is 30 feet. The width of the garden is 8 feet.
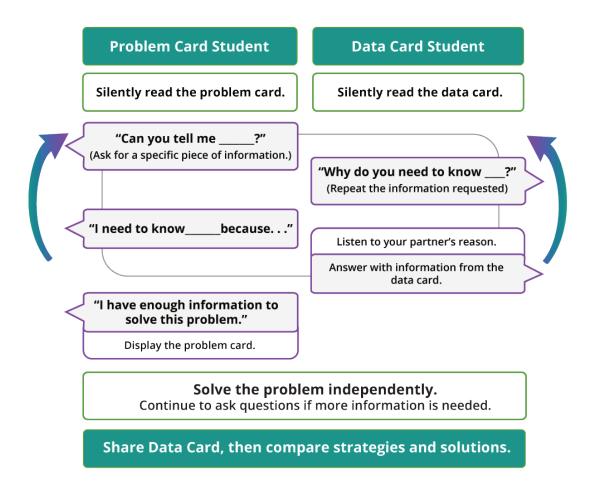
- Clare says she can use multiplication to find the length of rope Andre needs.

- Diego says he can use addition to find the length of rope Andre needs.

Who do you agree with? Explain or show your reasoning.

10.2: Info Gap: A Garden and a Playground

Your teacher will give you either a problem card or a data card. Do not show or read your card to your partner.

Problem Card Student	Data Card Student
Silently read the problem card.	**Silently read the data card.**

"Can you tell me _____?"
(Ask for a specific piece of information.)

"Why do you need to know ___?"
(Repeat the information requested)

"I need to know_____because. . ."

Listen to your partner's reason.

Answer with information from the data card.

"I have enough information to solve this problem."

Display the problem card.

Solve the problem independently.
Continue to ask questions if more information is needed.

Share Data Card, then compare strategies and solutions.

Pause here so your teacher can review your work.

Ask your teacher for a new set of cards and repeat the activity, trading roles with your partner.