## Lesson 18: Diagrams and Equations for Word Problems

- Let's connect diagrams and equations to situations.


## Warm-up: Notice and Wonder: Diagrams

What do you notice? What do you wonder?


## 18.1: Card Sort: Situations, Equations, and Diagrams

Your teacher will give you a set of cards showing situations, equations, and diagrams.
Sort the cards into groups so that the cards in each group represent the same situation. Be ready to explain your reasoning.

| A | Clare had 225 beads. A friend gave her a pack of 48 beads. Then she used 70 beads to make a necklace. How many beads does Clare have now? |
| :---: | :---: |
| B |  |
| C | $225-(6 \times 10)=?$ |
| D | Elena has 7 notebooks. Each notebook has 10 paper clips in it. Elena also has a box of 225 paper clips. How many paper clips does Elena have? |
| E | $225+(6 \times 10)=?$ |
| F | $?=225+48-70$ |
| G | Andre has 225 crayons. He buys 6 more packs and each pack has 10 crayons. How many crayons does Andre have now? |
| H | $?$ 10 10 10 10 10 10 <br> 225       |
| 1 | Diego has a collection of 225 baseball cards. He gets 35 more cards from a friend, then buys 72 cards. How many cards does Diego have now? |
| J | Han has 225 beads. Then he makes 6 bracelets for his friends. Each bracelet has 10 beads. How many beads does Han have now? |
|  | 225 35 72 |
| L | $?=(7 \times 10)+225$ |

## 18.2: Makes Sense to Me: A Gallery Walk

1. Your teacher will assign a problem to your group. Work together to solve your assigned problem.
2. Create a poster of your group's solution. Organize your work so that it can be followed by others.
3. As you visit other groups' posters, consider how each answer makes sense.

Choose one poster and make a comment on the solution. Write on your sticky note how you know the answer makes sense.

