## Lesson 21: Different Ways to Solve Problems

* Let’s reason about and solve multi-step problems.

### Warm-up: Which One Doesn’t Belong: Expressions with 5 or 90

Which one doesn’t belong?

1. $5×90$
2. $90+90+90+90+90$
3. $\left(4×90\right)+\left(1×90\right)$
4. $3×3×10×5$

### 21.1: Going on a Field Trip

1. Forty-five students are going on a field trip to a museum. Tickets for the museum are $18 each. Teachers have $900 to cover tickets for the trip. Will this be enough to cover tickets for every student?
* If yes, will there be any leftover money and how much?
* If no, how much more money is needed?
1. Your teacher will show five strategies for answering the previous question. Analyze the strategies.
	1. Which strategy is closest to yours? With a partner, take turns explaining how your strategy is close to the poster you chose.
	2. Discuss a different strategy with your partner. Try using this strategy to find the value of $14×35$.

### 21.2: A Trip to the Movies

Movie tickets are $9 each. The theater sold the same number of tickets two days in a row.

The theater made $3,132 from ticket sales on the first day.



1. Record and answer one question of your choice from the list the class generated. Discuss your strategy with your partner.
2. Use the given information about movie tickets to complete the following statement:
* \_\_\_\_\_\_\_\_\_\_ tickets were sold on the first and second days.
1. A medium drink is $7 and small popcorn is $5. If each ticket holder purchases popcorn and a drink, how much money will the theater collect from the sales of popcorn and drink?



© CC BY 2021 Illustrative Mathematics®