

Touchdowns and Field Goals

Lesson Plan



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The Task

Emma plays in a flag football league where the only two ways to score are via touchdowns, which are worth 7 points, and field goals, which are worth 3 points. In yesterday's game, her team scored eight times. How many points did her team score?

Find all possible solutions.

Materials

- The task
- Share video clip or pictures of a flag football game
- Large Presentation Paper per group

Facilitating Task

- Begin by sharing video or pictures of flag football game.
- Read the problem together. Have students retell the problem in their own words.
- Provide individual work time for students to begin finding possible solutions.
- Form small groups (4 students maximum) to compare strategies and solutions. After reaching consensus as a group, record solution and justification on Presentation Paper.
- Each group shares and justifies their solution to the class.
- As groups share, the teacher asks questions to support students in connecting the strategies shared and the mathematical ideas highlighted.

Misconceptions

- Students may be confused by the constraints. Students may add field goals and touchdowns before multiplying or find the total points and not count the number of touchdowns and field goals.
- Students may solve the problem without finding all possible ways.

Suggested Prompts or Questions

- How does your solution make sense to you?
- How is your strategy similar to another strategy that someone used?
- What do you know about the problem?
- How do you know you have found all possible ways Emma's team could have scored touchdowns and/or field goals?