

Purchasing Tickets to a Game

Objective:

By the end of the activity, the students will be able to:

- Analyze a real world scenario with constant proportionality.
- Show proportional relationship through multiple representations.

Teacher Preparation:

- Have the students in small groups (2-4 members).
- Provide copies of the “Purchasing Tickets to a Game” activity sheet.

Activity:

- Introduce the scenario to the students.
- Then, pass out the activity sheet. Allow sufficient time for the students to work through the scenario.
- You will walk around to facilitate student interaction. Ask probing questions, and encourage the students to display more than one method to obtain an answer.

South Carolina College- and Career-Ready Standards for Mathematics:

7.RP.2 Identify and model proportional relationships given multiple representations, including tables, graphs, equations, diagrams, verbal descriptions, and real-world situations.

Extensions:

- Refer back to this activity as a bridge for proportions, constant proportionality, writing equations, and unit rates.
- Allow the students to create their own scenario and table that represents constant proportionality.
- Give the students a labeled graph or allow them to make and label their own.



2. Graph the numbers from the original table (before you filled it in) on a coordinate plane.
- a. What patterns do you see in your graph?

- b. Draw a line through the points. How does your line compare to how you filled in your table?

3. What is the cost per ticket? Explain your reasoning.

4. What will the price be for game if you needed 13 tickets? Justify your answer.

5. What is the maximum number of tickets you could purchase if you only had \$115? Explain your reasoning.
