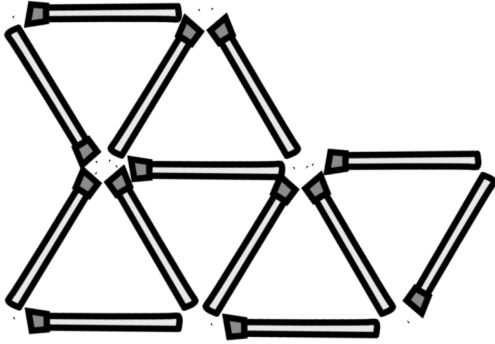The following problem is a brainteaser for your enjoyment. It is intended to encourage working together and family problem solving fun. It is not a required element of this homework assignment.
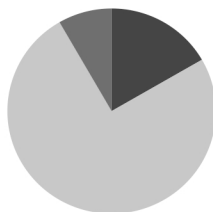
Remove 3 matches to leave 3 triangles.

Lesson 23

Objective: Make sense of complex, multi-step problems and persevere in solving them. Share and critique peer solutions.

Suggested Lesson Structure

■ Fluency Practice   (10 minutes)
■ Concept Development   (45 minutes)
■ Student Debrief   (5 minutes)
   Total Time   **(60 minutes)**

Fluency Practice (10 minutes)

▪ Sprint: Change Mixed Numbers into Improper Fractions **5.NF.3**   (10 minutes)

Sprint: Change Mixed Numbers into Improper Fractions (10 minutes)

Materials: (S) Change Mixed Numbers into Improper Fractions Sprint

Note: This Sprint reviews G5–Module 3 concepts.

Concept Development (45 minutes)

Materials: (S) G5–M6–Lesson 21 Problem Set

1. Establish the intention and structure of today's lesson.

Advise students that today they will revisit their solutions completed in G5–M6–Lessons 21–22 with a new team of three who also solved that problem. Depending on the class, consider doing a whole-group guided example using a simple problem such as, "Mrs. Peterson harvested 500 apples. She gave 1 seventh to her brother and 2 thirds of the remainder to the food pantry. How many apples does she have left?"

2. Organize new teams of three.

Based upon an analysis of the solutions, students' strengths, weaknesses, and inter-relationships, organize teams of three to present solutions to the same problem.

> **NOTES ON LESSONS 21–25:**
>
> Lesson Sequence for M6–Topic E:
> ▪ Lessons 21–22 use a protocol to solve problems within teams of four. The number of problems solved will vary between teams.
> ▪ Lesson 23 uses a protocol to share and critique student solutions from Lessons 21–22.
> ▪ Lesson 24 resumes the problem solving begun in Lessons 21–22.
> ▪ Lesson 25 uses the protocol from Lesson 23 to again share and critique student solutions.

Answer Key

1. 14 bags
2. Answers will vary. (*Hint: Think three-dimensionally.)*
3. Answers will vary.