**Homework Activity:** (#9) Spend 15-20 minutes working on any unfinished [Mathspace](https://mathspace.co/student/) assignments.

**Classwork:** Plot yourself on the Mood Meter and identify a word that describes your mood.Two-minute meditation: Hunter's choice.

**Activity 1:** Review how to use ratios to solve similarity and rate problems. Log into [Mathspace](https://mathspace.co/student/%C2%A0) and spend 35 minutes on the assignment below.

1. Using Ratios to Solve Similarity Problems
2. Rate 4

**Activity 2:**For the rest of the period, complete "POW 6: [The Haybaler Problem](http://www.jackpowers13.com/wp-content/uploads/2019/04/The-Haybaler-Problem.pdf)" collaboratively (Team 1: Hunter and Ryan; Team 2: Rita, Bella & Caroline). Begin by writing a Problem Statement and keep track of your process as you work toward figuring out how much each bale weighs.

Share answers.

**Use ratios & cross multiply**

**Example 1:** A large tree casts a shadow of 30m. At the same time, a 6m high fence, standing vertically, casts a shadow of 12m. Find h, the height of the tree, using a proportion statement.

6m (height) = X (height) 6 • 30 = 12 • x 180 = 12x

12m (shadow) 30m (shadow)

180 = 12x x = 15 meters

12 12

**Example 2:** An airplane flies at constant speed of 820 miles per hour. How long will it take to travel a distance of 1230 miles?

1 (hours) = x (hours) 1 • 1230 = 820 • x 1230 = 820x

820 (miles) 1230 (miles)

1230 = 820x x = 1.5 hours

820 820