6.RP Equivalent Ratios 2

Task

In a marching band there are 24 trombones and 15 snare drums.

a. Heather says, "The ratio of trombones to snare drums is 24:15." Audrey says, "No, the ratio of trombones to snare drums is 8:5." Who is right, and why?

b. A different marching band has 30 snare drums, but its trombone to snare drum ratio is the same as the first marching band. How many trombones does it have?

c. Explain what these ratios all have in common: 8:5, 16:10, 24:15. Create a diagram to support your answer.

d. Mathematicians call these "equivalent ratios." Come up with a new set of ratios that are equivalent to 6:21.

e. Explain in your own words the meaning of "equivalent ratios."