Mixing Paints With Ratios (6G)

Topic: Equivalent Ratios

Learning goals

Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
Use ratio and rate reasoning to solve real-world and mathematical problems.

Sim
[Proportion Playground](#)

Explore

1. Play with Proportion Playground.

Generate Cases

2. Create a hue of orange. Then try to create the same orange, with different amounts of red and yellow paint. Write down the ratios that make the same hue.

3. Compare your work with someone else's.

Conjecture

4. Make a conjecture about what is always true about the ratios that produce the same color orange.

Justify

5. Justify using what you know about paint, numbers, symbols, or diagrams.

Conclude

6. Write down the conclusion you think is most important.

Extension

7. A painter tries the sim and says "10 reds and 11 yellows make the same hue of orange as 11 reds and 12 yellows, so 10:11 = 11:12". Do you agree or disagree? Give a justification for your answer.