

The Common Denominator



A family math newsletter

Math 8 Unit 2: Proportional/Non-proportional Relationships

Unit at a Glance

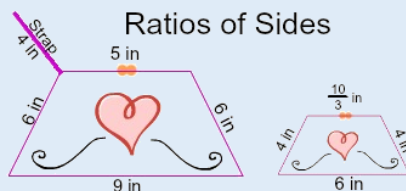
Skills/ Topics:

- Graph proportional relationships interpreting the unit rate as the slope.
- Use similar triangles to explain why the slope is the same between any two distinct points.
- Derive the equation for $y=mx$ for a line through the origin and $y=mx+b$ for a line intercepting the y -axis.
- Compare properties of functions represented algebraically, graphically, in tables, or by verbal descriptions.
- Construct a function to model a linear relationship between two quantities and interpret the rate of change and the initial value in terms of the situation.
- Construct and interpret scatterplots for bivariate data to investigate patterns of association.



Length: 39 Days (45 minutes); 19 Days (90 minutes)

Exploring Mathematics



Ratios of Sides:

Mom Purse
Daughter Purse

$$\frac{6}{4} = \frac{3}{2}$$

$$\frac{9}{6} = \frac{3}{2}$$

$$\frac{5}{\frac{10}{3}} = 5 \cdot \frac{3}{10} = \frac{3}{2}$$

Resource Toolkit

HMH Resources

Module 3: Proportional Relationships pg. 67-90

Module 4: Non-Proportional Relationships pg. 91-122

Module 5: Writing Linear Equations pg. 123-138

Module 6: Functions pg. 149-180

Discovery ED Techbook Info

Grade 8

Introduction to Functions, Concept 7.1, 7.2, 7.3 and 7.4

Linear Relationships, Concept 8.1 and 8.2

HW Help Section

Khan Academy

[Intro Proportional and Non-proportional](#), [Unit Rate](#), [Slope and y-intercept](#), [Linear Equations](#), [Functions](#)



Give me a lever long enough and a fulcrum on which to place it, and I shall move the world.

-Archimedes