Participant Handout

Invigorate, Engage, Inspire: Low-Floor, High-Ceiling Activities

The Coupon Task

Which coupon would you rather have and why?

Coupon A

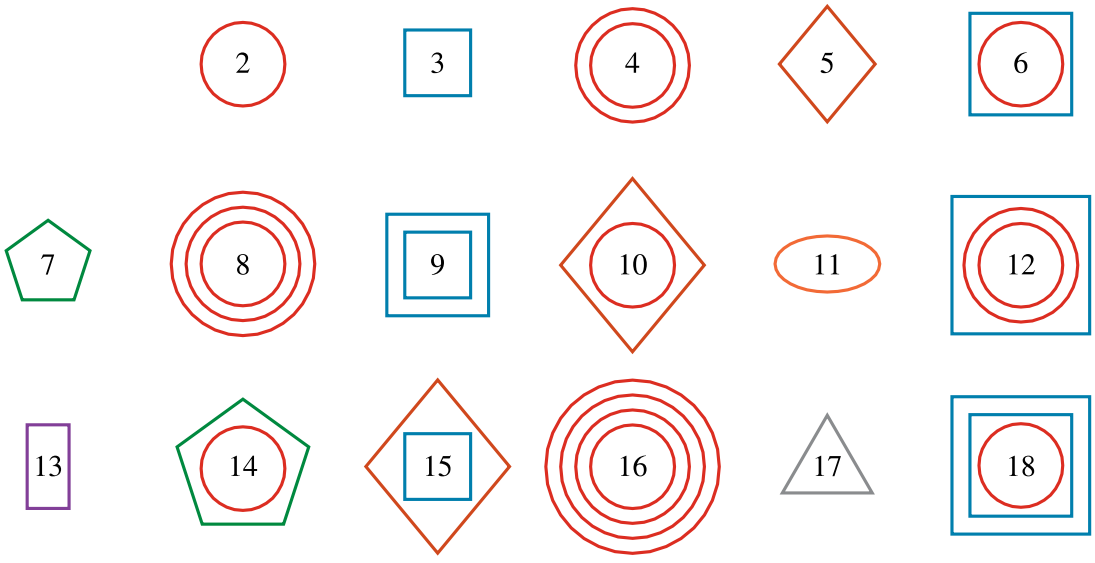
30% *off*

Coupon B

$30 *off*

The Shapes and Numbers Task

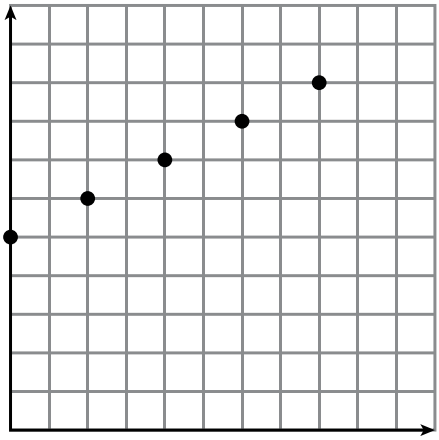
What do you notice? What do you wonder?



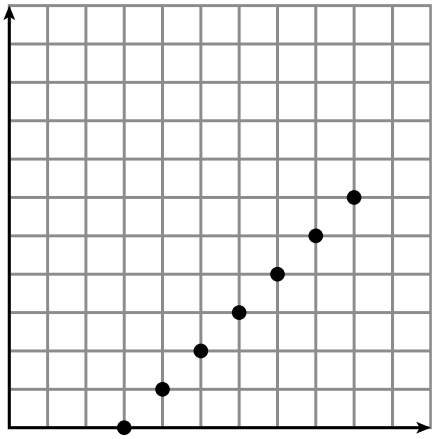
The Graphs Task

Create two real-world situations that could be represented by the graphs.

Graph A



Graph B



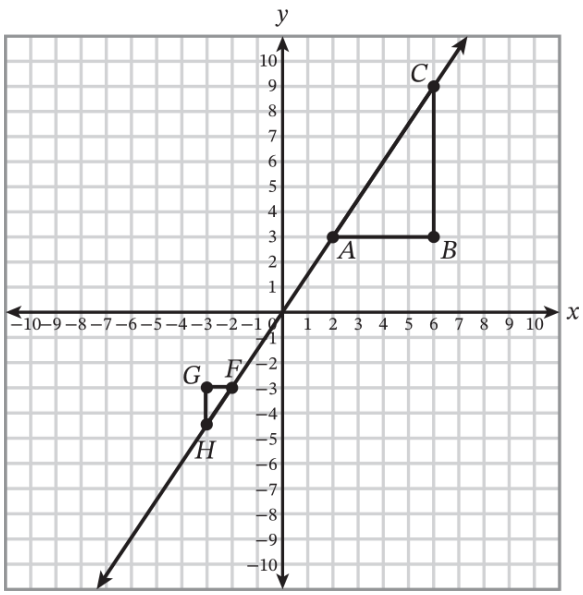
Design a Task: Lower the Floor

What number could be inserted in each set of parentheses to make the equation true?

$$(\quad)(\quad)(\quad) = -3\frac{1}{4}$$

Design a Task: Raise the Ceiling

In the diagram, the right triangles have horizontal and vertical legs, and the hypotenuses lie on the same line. What is the value of $\frac{GH}{FG}$?



Design a Task: Lower the Floor and Raise the Ceiling

Design two different boxes in the shape of a right rectangular prism to hold 24 identical ice cream sandwiches. Determine the volume and surface area of each box. Which box is best? Why?