STORY PROBLEM CARDS (SAMPLE RESPONSES)

Soda Story

$$\frac{\$0.97 + x}{2} = \$1.29$$
$$x = \$1.61$$

$$\frac{16oz. + y}{2} = 22 oz.$$
$$y = 28 oz.$$

The large-sized drink should be 28 ounces and cost \$1.61.

City Planning

Midpoint from the Station to Church

$$M: \left(\frac{-2+6}{2}, \frac{6+(-6)}{2}\right) = (2, 0)$$

Midpoint from point M to Station

$$\left(\frac{2+(-2)}{2},\frac{0+6}{2}\right)=(0,3)$$

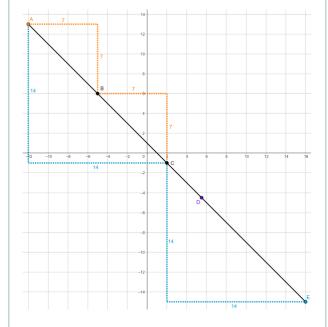
The post office is at (0, 3).

Battleship

$$M : \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$$
$$= \left(\frac{-19 + 17}{2}, \frac{-35 + 33}{2}\right)$$
$$= (-1, -1)$$

They both started at their current midpoint: (-1, -1).

Coordinate Conundrum



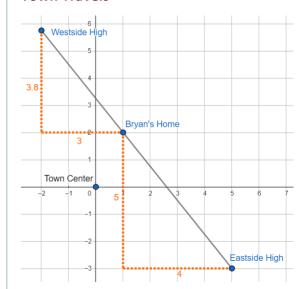
$$A:(-12,13)$$

$$E:(16,-15)$$

$$D:\left(\frac{16+(-5)}{2},\frac{-15+6}{2}\right)=\left(\frac{-11}{2},\frac{-9}{2}\right)$$

STORY PROBLEM CARDS (SAMPLE RESPONSES)

Town Travels



Bryan's statement does not make mathematical sense because based on the rise and run differences between the points on the graph, Bryan's home is closer to Westside High, so he should go there.

Real Estate Rules

$$\frac{1640 + x}{2} = 1730$$
$$x = 1820$$

Since a 1730-square-foot home is the middle size of the homes, then so is its price.

$$\frac{330,490+y}{2} = 393,840$$
$$y = 457,190$$

The 1820-square-foot home should cost \$457,190.