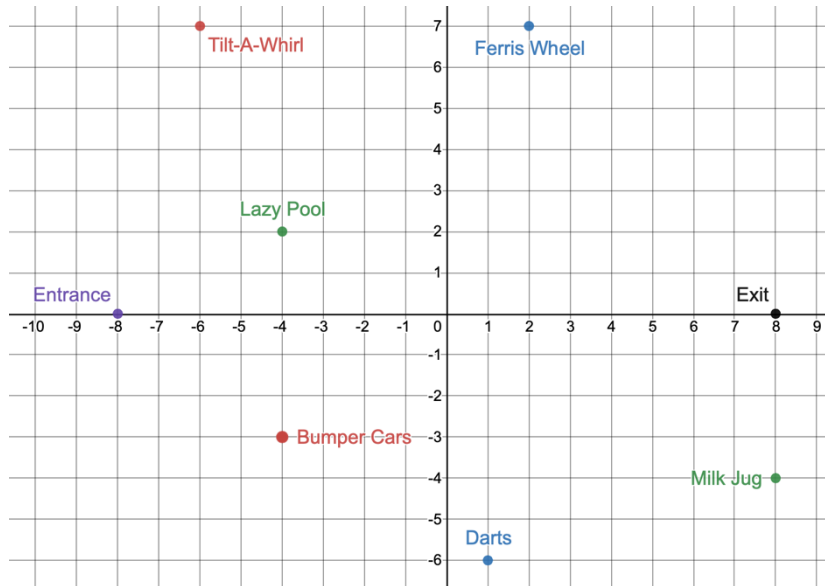




Wild Wonders Amusement Park



Use the map of the amusement park to answer the questions below. Assume that you always take the shortest, most direct route between attractions. Each unit on the grid represents 1 meter.



Task 1

- Every day a food truck sets up at a location that is conveniently half-way between the Entrance and the Exit. Plot and label the location of the food truck.
- After getting lunch from the food truck, you decide to head to the Milk Jug . Give the coordinates of the half-way point. Explain how you know.
- Are the Bumper Cars closer to the Entrance, to the Darts, or the same distance from both? Give a convincing argument.

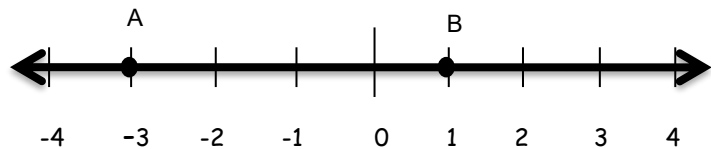
Task 2

- A new ride, the Intimidator, will be built half-way between the Milk Jug and Ferris Wheel.
 - What is the x-coordinate of this new ride?
 - What is the y-coordinate of this new ride?
 - Plot and label the Intimidator on the map.
- The Exit is exactly half-way between the Ferris Wheel and where you parked your car. Give the coordinates of your parking spot.

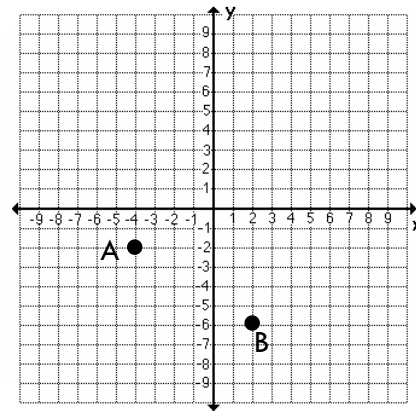
Task 3

1. What is the halfway point midpoint between $(4, 10)$ and $(6, 2)$
2. What is the halfway point midpoint between $(-8, 12)$ and $(2, 14)$
3. What is the halfway point midpoint between $(0, -6)$ and $(-4, 2)$
4. What is the halfway point midpoint between $(9, 2)$ and $(8, -2)$
5. Given segment AC and B is the midpoint. If $A(7, -5)$ and $C(9, 1)$, what are the coordinates of B ?

Task 4



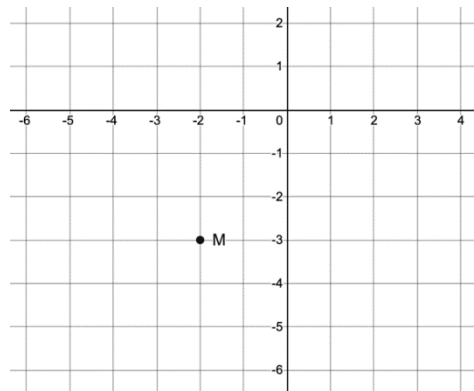
1. What is the coordinate of the midpoint?
2. What if I told you that B was the midpoint of A and an unknown point. What would the unknown point be?
3. B is the midpoint of AC , Find the coordinates of C



4. Point $M(5, -7)$ is the midpoint of \overline{CD} . If C is $(2, -3)$, find the coordinates of D .

Task 5

1. Draw 2 line segments of different lengths that both have M as a midpoint.



Task 6

In the coordinate plane, point A has coordinates $(-2, -1)$ and point B has coordinates $(10, 7)$. What are the coordinates of the points that divide segment AB into a ratio of 1 to 3 (1:3)?

