## Big Ideas Math®



# **Race for Distance**

### ▶ Materials:

- Game cards
- Timer
- Paper
- Pencil
- Calculator
- Answer sheet

#### Directions:

Students play as a group and then form different pairs each round. Each student needs an answer sheet

- 1. Each student draws a game card and partners with another student.
- 2. Start the timer.
- 3. Students write down their partner's name and point coordinates on their answer sheet.
- 4. Each student determines the distance between the two points using the Distance Formula and the midpoint between the two points using the Midpoint Formula. These values are recorded on the answer sheet. **NOTE**: Students should round their answers to the nearest tenth when appropriate
- 5. Students then find a new partner.
- 6. Repeat steps 3-5 until the student completely fills the answer sheet.

Once a student completes his answer sheet, he records the time on the answer sheet. For every correct distance or midpoint, the student subtracts 5 seconds from the total time. For every incorrect distance or midpoint, the student adds 30 seconds to the total time. The resulting answer is the final score.

#### ▶ Who Wins?

The student with the lowest final score wins.

#### ► Tips:

- The timer should be large and visible for all students.
- Distance and midpoint calculators are available online for students to quickly check their answers.

(-5, -5)	(-5, -4)	(-5, -3)
(-5, -2)	(-5, -1)	(-5, 0)
(-5, 1)	(-5, 2)	(-5, 3)
(-5, 4)	(-5, 5)	(-4, -5)
(-4, -4)	(-4, -3)	(-4, -2)
(-4, -1)	(-4, 0)	(-4, 1)

(-4, 2)	(-4, 3)	(-4, 4)	
(-4, 5)	(-3, -5)	(-3, -4)	
(-3, -3)	(-3, -2)	(-3, -1)	
(-3, 0)	(-3, 1)	(-3, 2)	
(-3, 3)	(-3, 4)	(-3, 5)	
(-2, -5)	(-2, -4)	(-2, -3)	

(-2, -2)	(-2, -1)	(-2, 0)
(-2, 1)	(-2, 2)	(-2, 3)
(-2, 4)	(-2, 5)	(-1, -5)
(-1, -4)	(-1, -3)	(-1, -2)
(-1, -1)	(-1, 0)	(-1, 1)
(-1, 2)	(-1, 3)	(-1, 4)

(-1, 5)	(0, -5)	(0, -4)
(0, -3)	(0, -2)	(0, -1)
(0, 1)	(0, 2)	(0, 3)
(0, 4)	(0, 5)	(1, -5)
(1, -4)	(1, -3)	(1, -2)
(1, -1)	(1, 0)	(1, 1)

(1, 2)	(1, 3)	(1, 4)
(1, 5)	(2, -5)	(2, -4)
(2, -3)	(2, -2)	(2, -1)
(2, 0)	(2, 1)	(2, 2)
(2, 3)	(2, 4)	(2, 5)
(3, -5)	(3, -4)	(3, -3)

(3, -2)	(3, -1)	(3, 0)
(3, 1)	(3, 2)	(3, 3)
(3, 4)	(3, 5)	(4, -5)
(4, -4)	(4, -3)	(4, -2)
(4, -1)	(4, 0)	(4, 1)
(4, 2)	(4, 3)	(4, 4)

(4, 5)	(5, -5)	(5, -4)
(5, -3)	(5, -2)	(5, -1)
(5, 0)	(5, 1)	(5, 2)
(5, 3)	(5, 4)	(5, 5)

## Answer sheet for Race for Distance

My Name:	Name: My Point:		
Partner's Name	Partner's Point	Distance	Midpoint
Time Flanced:	L		

