

 Treasure Island Coordinates

Name: _____

Date: _____

Class: _____

My level: ☐  Explorer ☐  Investigator ☐  Legend

Mission: An old captain's map uses a four-quadrant grid. Sail to landmarks, find their coordinates, decode reflection clues, and dig for the treasure.

Big question: How do we locate points in all four quadrants and find distances between them?



Warm-up: Where am I?

Name the quadrant or axis.

(3, −5)

(−2, −7)

Key vocabulary	
Coordinate plane	A grid formed by an x-axis and a y-axis.
Ordered pair	(x, y): x first, then y.
Quadrant	One of the four regions of the plane.
Reflection	A flip across an axis.

1

Box 1

Landmark log

Sail to each landmark and record it.

Landmark	x	y	Quadrant
Palm Grove 			
Bat Cave 			
Old Dock 			

2

Box 2

Clue 1: reflection

In the simulator: Sail there and dig.

Why is the reflection at (4, −6)?

☐ Reflecting across the x-axis keeps x and changes the sign of y ☐ You swap x and y ☐ You change both signs

3

Box 3

Distance

How far is it from Skull Rock (4, 6) to the chest at (4, −6)?

Answer: _____ units

4 Box 4

Clue 2

In the simulator: Sail there and dig.

How far is the second chest from Palm Grove?

Answer: _____ units

5 Box 5

Legend: the final chest **Legend only**

Where is the final chest?

☐ (6, 4) ☐ (-6, 4) ☐ (6, -4) ☐ (4, 6)

6 Box 6

Captain's notes

Explain how you can tell which quadrant a point is in just from its signs.

 Exit ticket: answer the big question in your own words

How do we locate points in all four quadrants and find distances between them?

Completion code:

Shown on the last screen of the simulator.