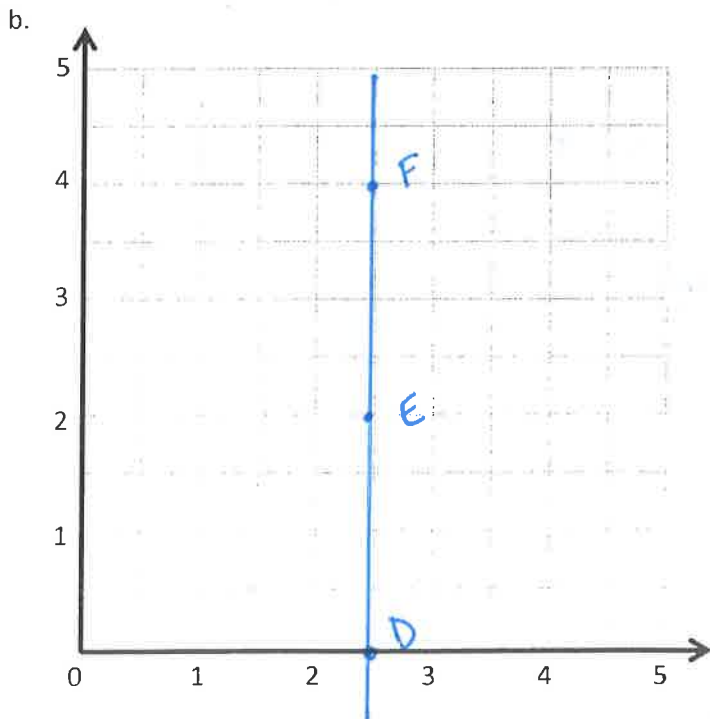
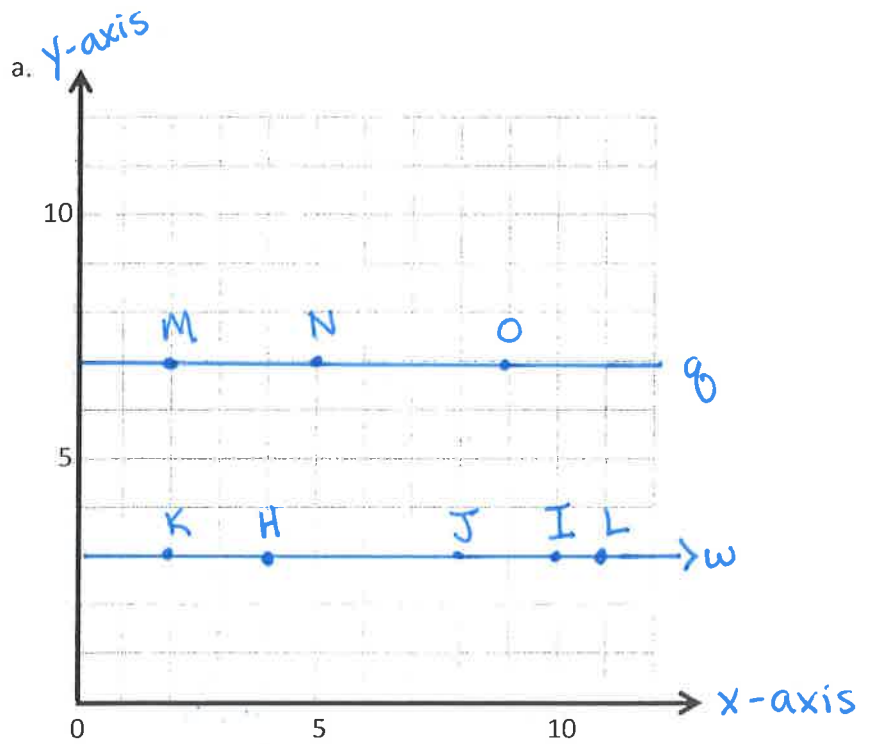


Point	$x$	$y$	$(x, y)$
$H$	4	3	$(4, 3)$
$I$	10	3	$(10, 3)$
$J$	8	3	$(8, 3)$
$K$	2	3	$(2, 3)$
$L$	11	3	$(11, 3)$

$M$   $(2, 7)$   
 $N$   $(5, 7)$   
 $O$   $(9, 7)$



$(2\frac{1}{2}, \_)$

Point	$x$	$y$	$(x, y)$
$D$	$2\frac{1}{2}$	0	$(2\frac{1}{2}, 0)$
$E$	$2\frac{1}{2}$	2	$(2\frac{1}{2}, 2)$
$F$	$2\frac{1}{2}$	4	$(2\frac{1}{2}, 4)$

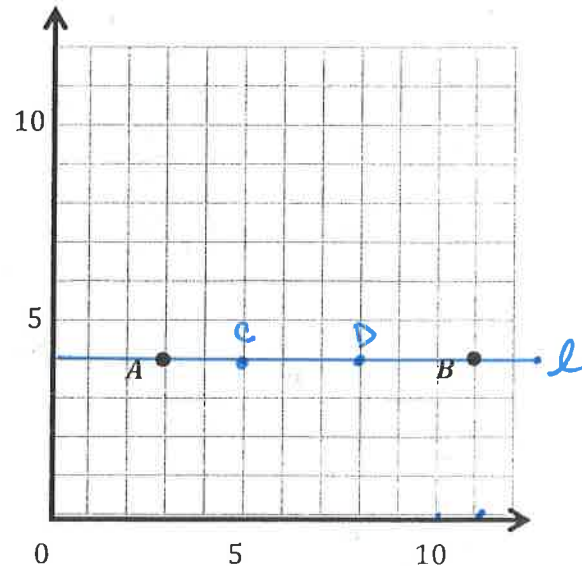
coordinate plane practice

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Use the coordinate plane to the right to answer the following questions.

- Use a straightedge to construct a line that goes through points  $A$  and  $B$ . Label the line  $e$ .
- Line  $e$  is parallel to the X-axis and is perpendicular to the Y-axis.
- Plot two more points on line  $e$ . Name them  $C$  and  $D$ .
- Give the coordinates of each point below.

A: (3,4)B: (11,4)C: (5,4)D: (8,4)

e. What do all of the points of line  $e$  have in common?

The  $y$ -coordinate is 4

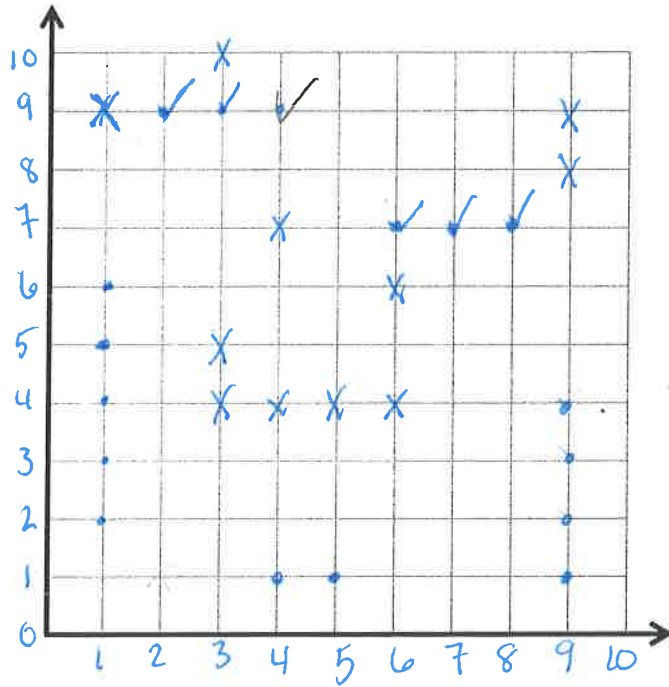
f. Give the coordinates of another point that would fall on line  $e$  with an  $x$ -coordinate greater than 15.

(16, 4)

**My Ships**

- Draw a red ✓ over any coordinate your opponent hits.
- Once all of the coordinates of any ship have been hit, say, "You've sunk my [name of ship]."

- Aircraft carrier—5 points
- Battleship—4 points
- Cruiser—3 points
- Submarine—3 points
- Patrol boat—2 points



5

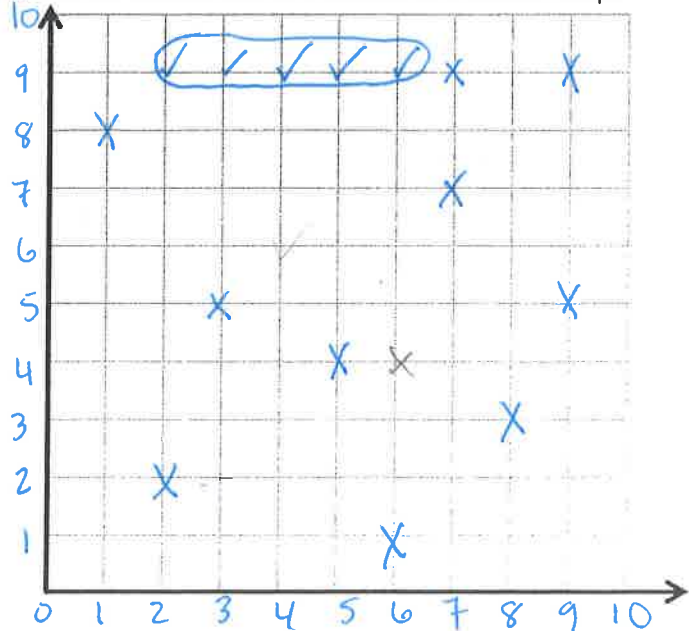
**Attack Shots**

- Record the coordinates of each shot below and whether it was a ✓ (hit) or an ✕ (miss).

( <u>3</u> , <u>5</u> )	( <u>5</u> , <u>9</u> )
( <u>9</u> , <u>9</u> )	( <u>6</u> , <u>9</u> )
( <u>7</u> , <u>7</u> )	( <u>7</u> , <u>9</u> )
( <u>9</u> , <u>5</u> )	( <u>4</u> , <u>9</u> )
( <u>1</u> , <u>8</u> )	( <u>3</u> , <u>9</u> )
( <u>8</u> , <u>3</u> )	( <u>2</u> , <u>9</u> )
( <u>2</u> , <u>2</u> )	( <u>6</u> , <u>1</u> )
( <u>5</u> , <u>4</u> )	( <u>6</u> , <u>4</u> )

**Enemy Ships**

- Draw a black ✕ on the coordinate if your opponent says, "Miss."
- Draw a red ✓ on the coordinate if your opponent says, "Hit."
- Draw a circle around the coordinates of a sunken ship.



## Battleship Rules

**Goal:** To sink all of your opponent's ships by correctly guessing their coordinates.

### Materials

- 1 grid sheet (per person/per game)
- Red crayon/marker for hits
- Black crayon/marker for misses
- Folder to place between players

### Ships

- Each player must mark 5 ships on the grid.
  - Aircraft carrier—plot 5 points.
  - Battleship—plot 4 points.
  - Cruiser—plot 3 points.
  - Submarine—plot 3 points.
  - Patrol boat—plot 2 points.

### Setup

- With your opponent, choose a unit length and fractional unit for the coordinate plane.
- Label the chosen units on both grid sheets.
- Secretly select locations for each of the 5 ships on your My Ships grid.
  - All ships must be placed horizontally or vertically on the coordinate plane.
  - Ships can touch each other, but they may not occupy the same coordinate.

### Play

- Players take turns firing one shot to attack enemy ships.
- On your turn, call out the coordinates of your attacking shot. Record the coordinates of each attack shot.
- Your opponent checks his/her My Ships grid. If that coordinate is unoccupied, your opponent says, "Miss." If you named a coordinate occupied by a ship, your opponent says, "Hit."
- Mark each attempted shot on your Enemy Ships grid. Mark a black ✖ on the coordinate if your opponent says, "Miss." Mark a red ✓ on the coordinate if your opponent says, "Hit."
- On your opponent's turn, if he/she hits one of your ships, mark a red ✓ on that coordinate of your My Ships grid. When one of your ships has every coordinate marked with a ✓, say, "You've sunk my [name of ship]."

### Victory

- The first player to sink all (or the most) opposing ships, wins.