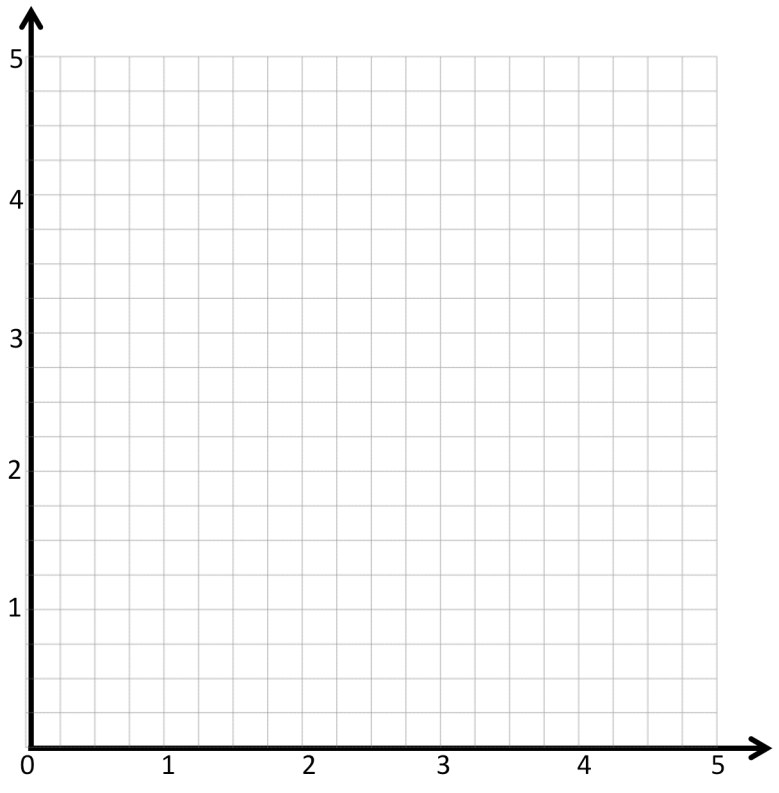
Name _____ Date _____

1. Write a rule for the line that contains the points $(0, \frac{1}{4})$ and $(2\frac{1}{2}, 2\frac{3}{4})$.

   a. Identify 2 more points on this line, then draw it on the grid below.

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $B$ | | | |
| $C$ | | | |




   b. Write a rule for a line that is parallel to $\overleftrightarrow{BC}$ and goes through point $(1, 2\frac{1}{4})$.

2. Give the rule for the line that contains the points $(1, 2\frac{1}{2})$ and $(2\frac{1}{2}, 2\frac{1}{2})$.

   a. Identify 2 more points on this line, then draw it on the grid above.

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $G$ | | | |
| $H$ | | | |

   b. Write a rule for a line that is parallel to $\overleftrightarrow{GH}$.

3. Give the rule for a line that contains the point $(\frac{3}{4}, 1\frac{1}{2})$, using the operation or description below. Then, name 2 other points that would fall on each line.

a. Addition: _____

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $T$ | | | |
| $U$ | | | |

b. A line parallel to the $x$-axis: _____

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $G$ | | | |
| $H$ | | | |

c. Multiplication: _____

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $A$ | | | |
| $B$ | | | |

d. A line parallel to the $y$-axis: _____

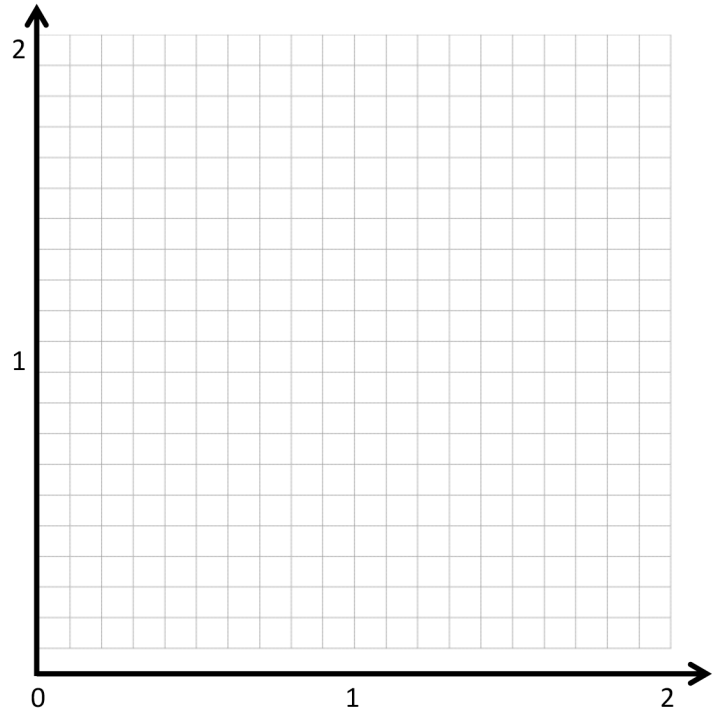
| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $V$ | | | |
| $W$ | | | |

e. Multiplication with addition:

_____

| Point | $x$ | $y$ | $(x, y)$ |
|---|---|---|---|
| $R$ | | | |
| $S$ | | | |

4. On the grid, two lines intersect at (1.2, 1.2). If line $\boldsymbol{a}$ passes through the origin, and line $\boldsymbol{b}$ contains the point at (1.2,0), write a rule for line $\boldsymbol{a}$ and line $\boldsymbol{b}$.



# Answer Key

1. a. Answers will vary.
   b. Answers will vary.
2. a. Answers will vary.
   b. Answers will vary.
3. a. Answers will vary.
   b. Answers will vary.
   c. Answers will vary.
   d. Answers will vary.
   e. Answers will vary.
4. Answers will vary.