Check Your Understanding – Graphing Lines and Finding the Rule

The table below identifies the key concepts from this unit.
1. Check your understanding by completing these questions.
2. Check your answers in the key provided.
3. In the table below, highlight the questions you got correct.
4. Ask peers/Dr. James about concepts where you can improve.

Key Concepts	Mild	Medium	Spicy
Graphing Lines		1a, b, c, d, e	
Finding the Rule from a Graph		2, 3, 4	
Finding the Rule Algebraically	5, 6, 7	8, 9, 10	

1. Graph the following lines on the Cartesian Plane below
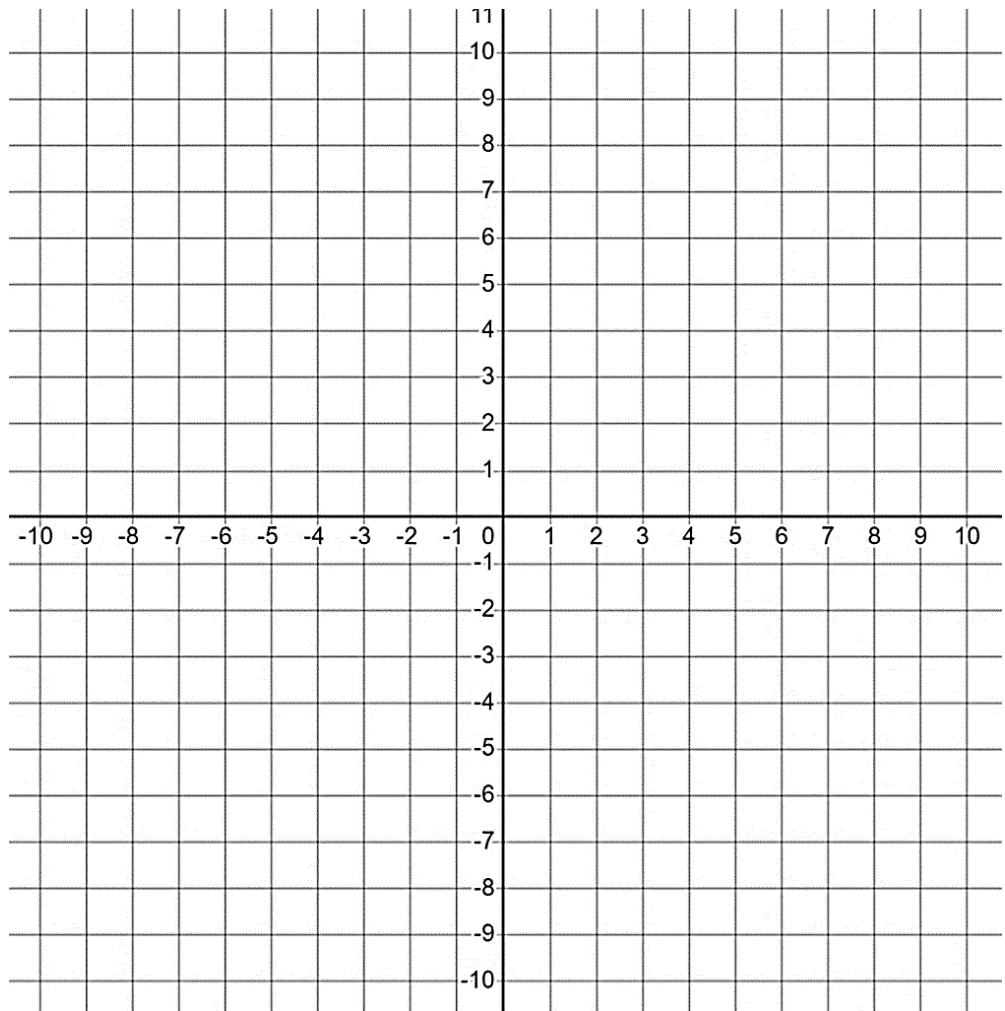
a. $y = \frac{1}{3}x + 2$

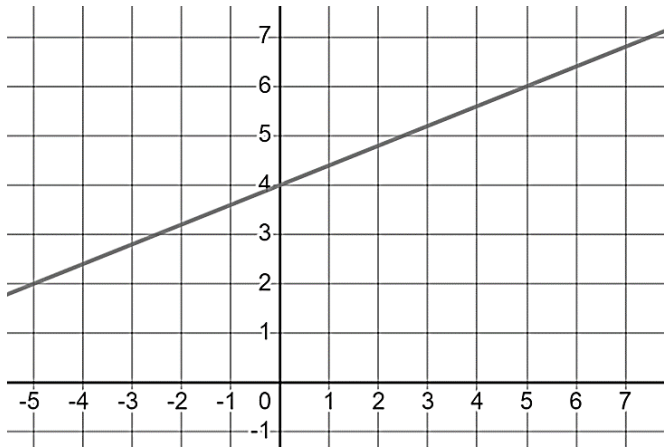**b.** $y = -\frac{3}{2}x + 4$

c. $y = \frac{5}{2}x - 7$

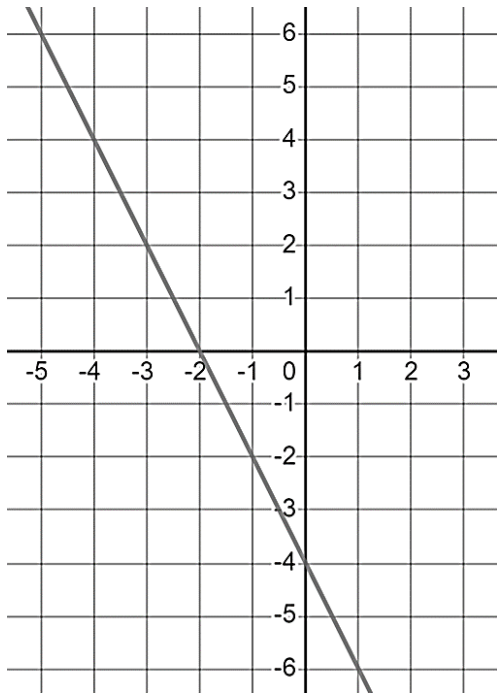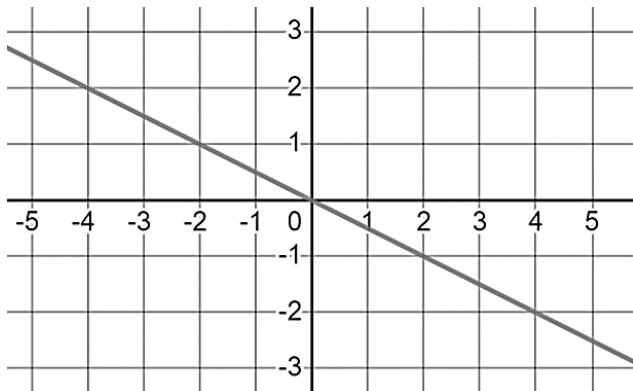**d.** $y = -2x - 1$

e. $y = 3x$

2. Find the rule of the line shown on the graph below

3. Find the rule of the line shown on the graph below

4. Find the rule of the line shown on the graph below

5. Find the rule of a line that has a slope of 2 and passes through the point $(18, 24)$

6. Find the rule of a line that has a slope of $\frac{3}{2}$ and passes through the point $(-6, -15)$

7. Find the rule of a line that has a slope of $-\frac{4}{5}$ and passes through the point $(60, 32)$
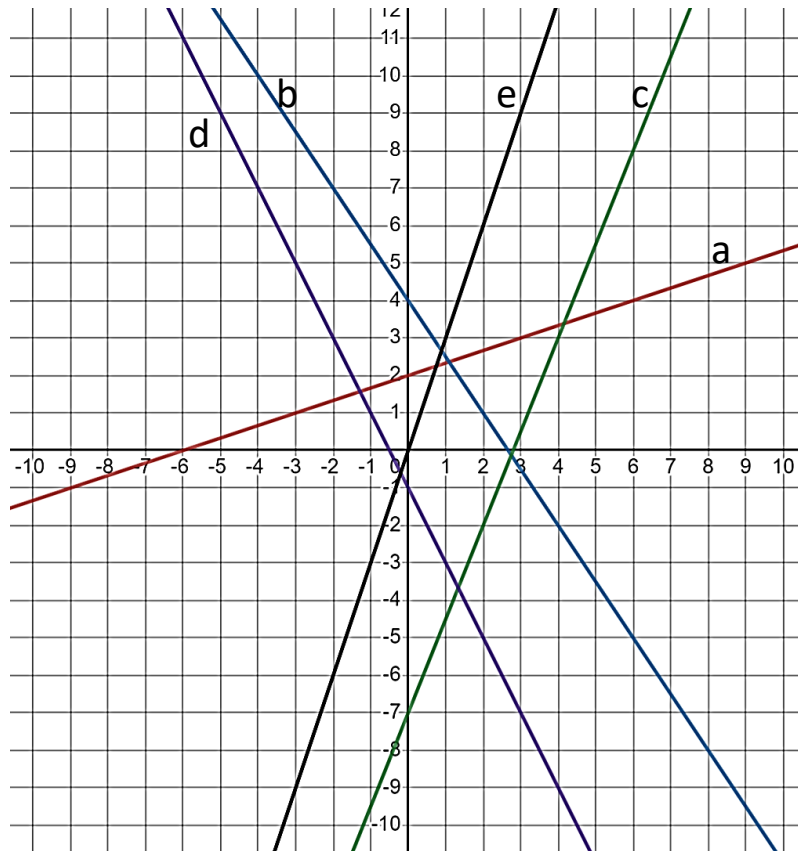
8. Find the rule of a line that passes through points $(2, 20)$ and $(4, 30)$

9. Find the rule of a line that passes through points $(-8, -10)$ and $(4, -19)$

10. Find the rule of a line that passes through points $(-42, -22)$ and $(-84, -47)$

Answer Key

1.

2. $y = \frac{2}{5}x + 4$

3. $y = -2x - 4$

4. $y = -\frac{1}{2}x$

5. $y = 2x - 12$

6. $y = \frac{3}{2}x - 6$

7. $y = -\frac{4}{5}x + 80$

8. $y = 5x + 10$

9. $y = -\frac{3}{4}x - 16$

10. $y = \frac{25}{42}x + 3$