

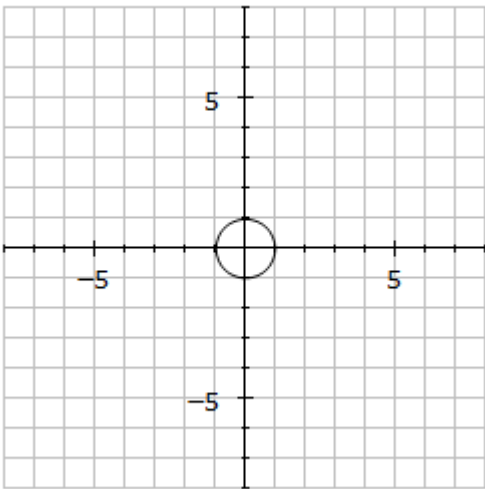
Extension Patterns and Graphs Practice #3

1. a) Write the equation, in terms of n , for the pattern: 12, 15, 18, 21, ...:

b) Write the equation, in terms of n , for the pattern: 99, 92, 85, 78 ...:

2. a) Write the first 5 terms for the formula $t_n = 5n + 1$:

b) Write the first 5 terms for the formula $t_n = 4 - 2n$:



3. On the grid:

a) Draw the graph of $y = (x - 2)(x + 2)$

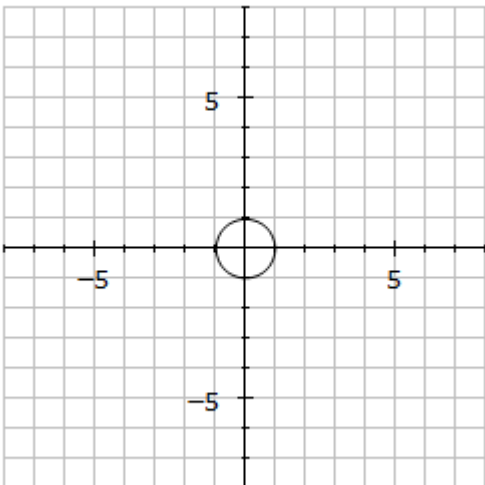
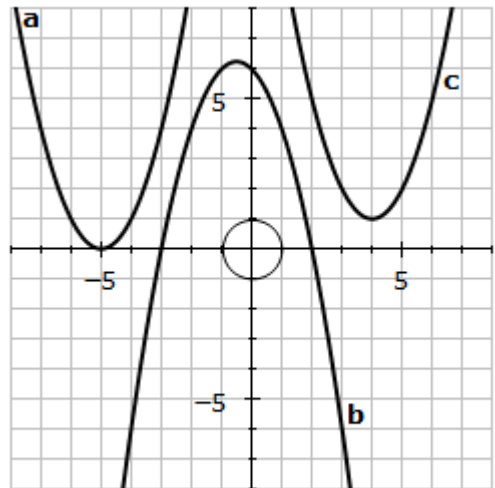
b) Draw the graph of $y = -x^2 - 1$

4. Write the equations for the graphs shown:

a)

b)

c)



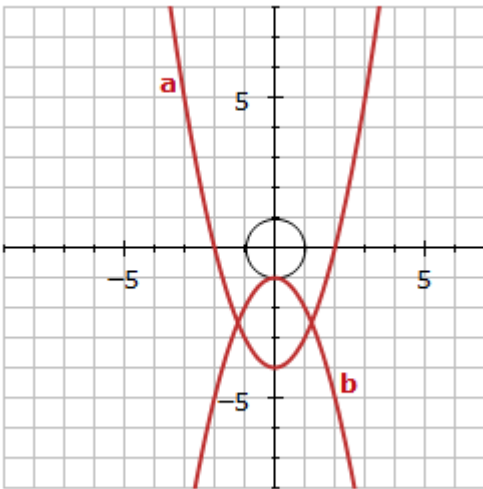
5. On the grid:

a) Draw the graph of $2y - 3x = 6$

b) Draw the graph of $2x + 4y + 8 = 0$

Answers: Extension Patterns and Graphs Practice #3

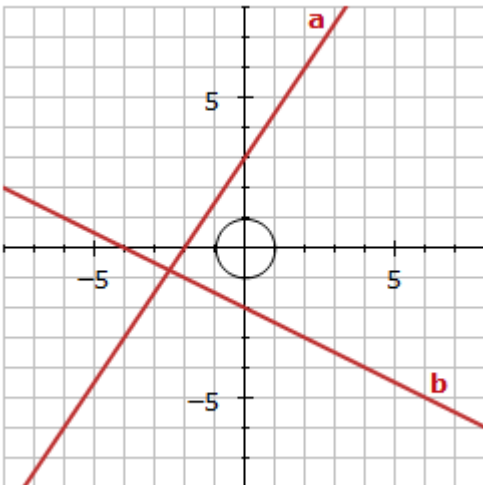
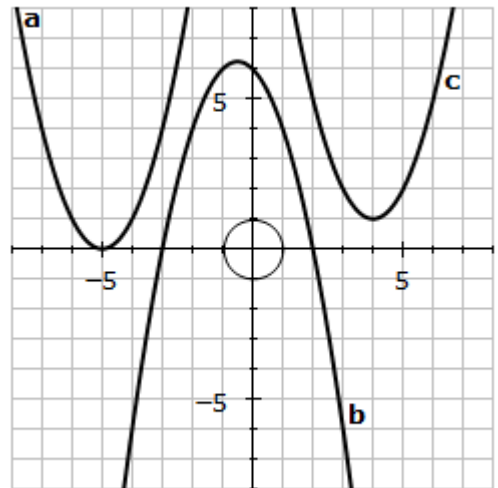
1. a) Write the equation, in terms of n , for the pattern: 12, 15, 18, 21, ...: $t_n = 3n + 9$
- b) Write the equation, in terms of n , for the pattern: 99, 92, 85, 78 ...: $t_n = -7n + 106$
2. a) Write the first 5 terms for the formula $t_n = 5n + 1$: **6, 11, 16, 21, 26**
- b) Write the first 5 terms for the formula $t_n = 4 - 2n$: **2, 0, -2, -4, -6**



3. On the grid:
- a) Draw the graph of $y = (x - 2)(x + 2)$
- b) Draw the graph of $y = -x^2 - 1$

4. Write the equations for the graphs shown:

- a) $y = (x + 5)^2$
- b) $y = -(x + 3)(x - 2)$
- c) $y = (x - 4)^2 + 1$



5. On the grid:
- a) Draw the graph of $2y - 3x = 6$
- b) Draw the graph of $2x + 4y + 8 = 0$