Name_____ ID: 1

Graphing Linear & Exponential Functions

Date_____   Period____

Sketch the graph of each line.

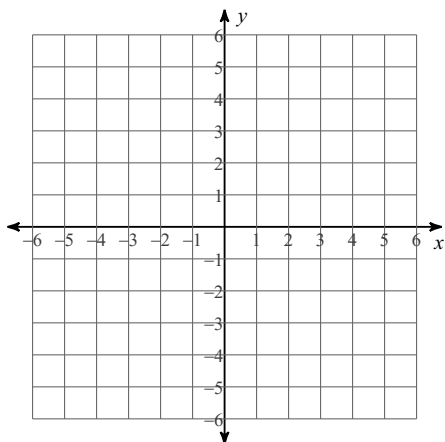1) $y = -\dfrac{3}{2}x + 1$

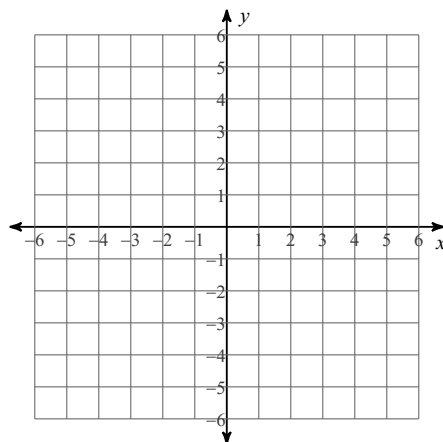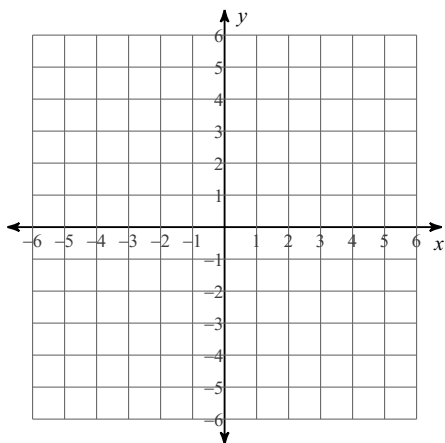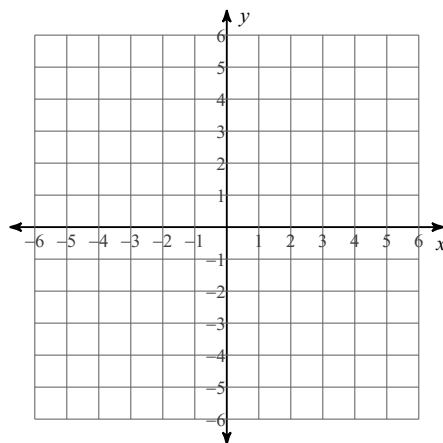2) $y = -\dfrac{3}{4}x - 5$

3) $y = 2x + 2$

4) $y = -x - 1$

5) $y = 3$
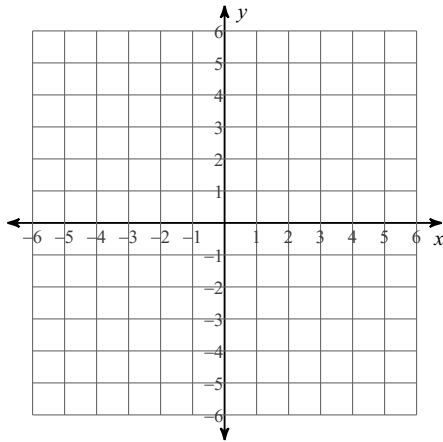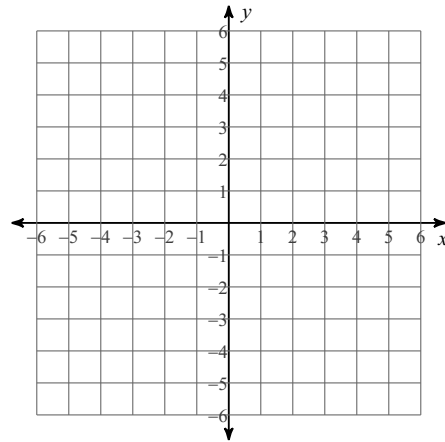
6) $2x + y = 5$

Given the x-intercept and the y-intercept, graph and write the equation of a line in slope-intercept form.

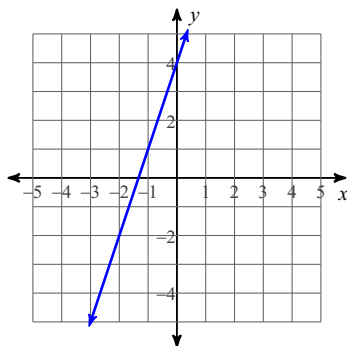7) x-intercept $= -1$, y-intercept $= -3$

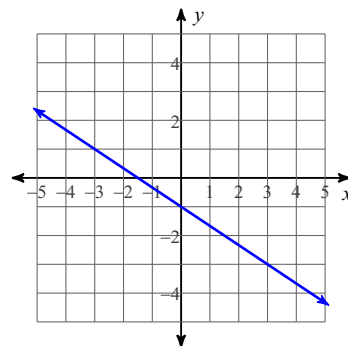8) x-intercept $= 5$, y-intercept $= -5$

Can you find the slope and y-intercept and write the equation of a line in slope-intercpet form (y=mx+b)?
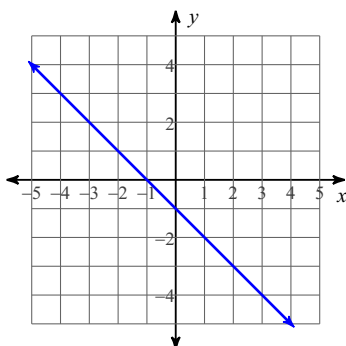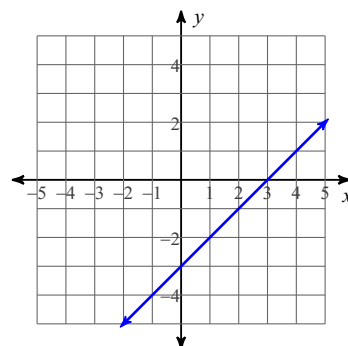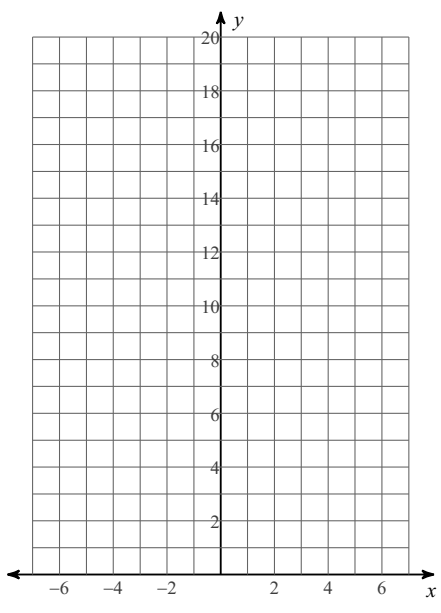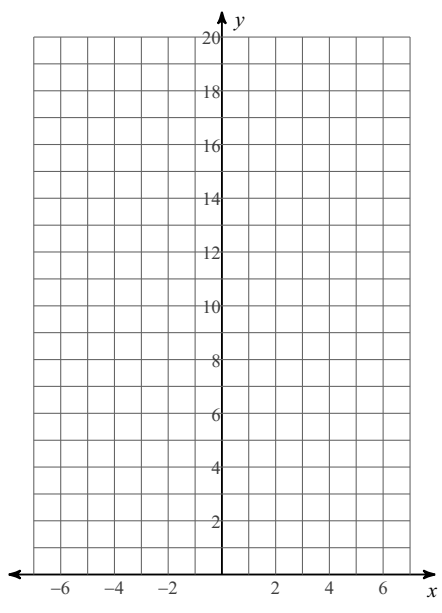
9)

10)

11)

12)

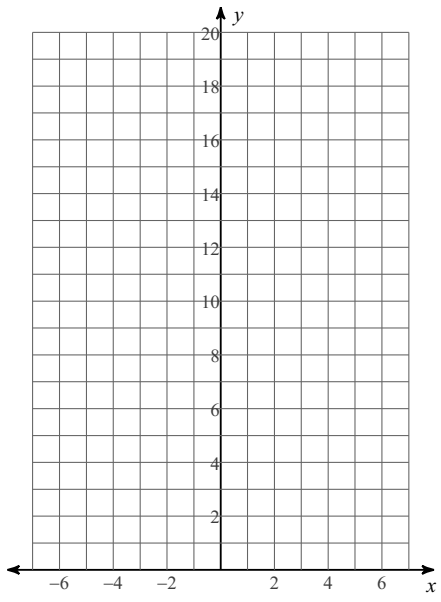**Sketch the graph of each expoential function.**

13) $y = 2 \cdot 2^x$
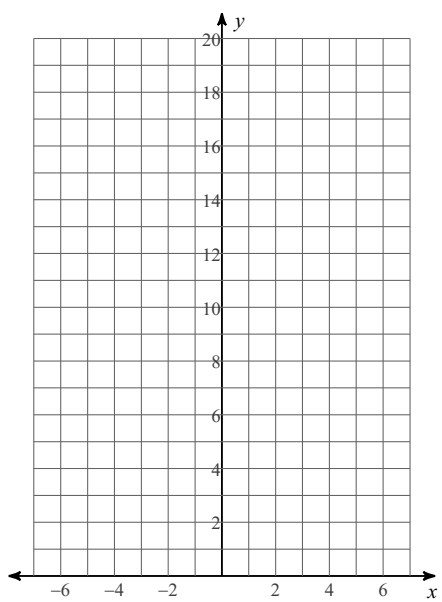
14) $y = 4 \cdot 2^x$

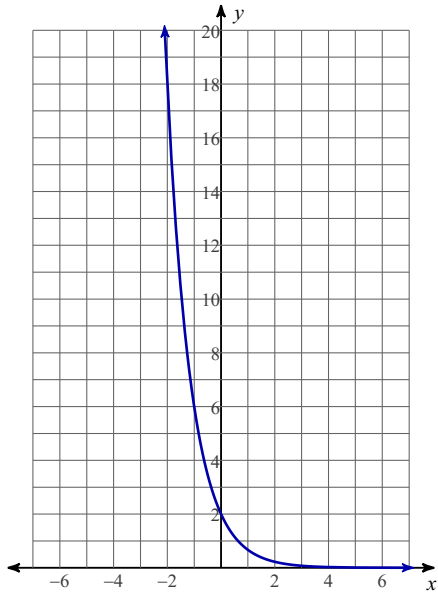15) $y = \dfrac{1}{2} \cdot 5^x$

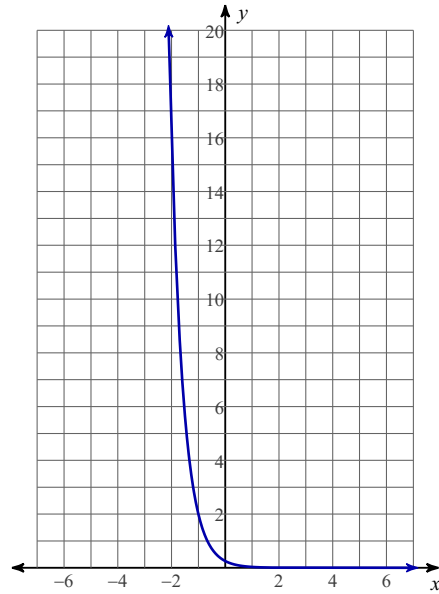16) $y = 2 \cdot \left(\dfrac{1}{3}\right)^x$

Write an equation for each graph.

17)

18)

Review: Simplify each expression.

19) $x - 1 - 8$

20) $3n - 6 + n$

21) $-4(-5n + 3)$

22) $-9(8v + 7)$

23) $-7(6 - 9m) - 10$

24) $2 - 4(1 - 8n)$

25) $-5r - 8(5r - 9)$

26) $-2(10n - 4) - 4n$