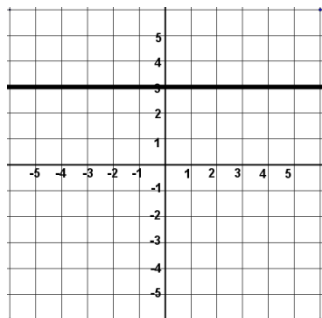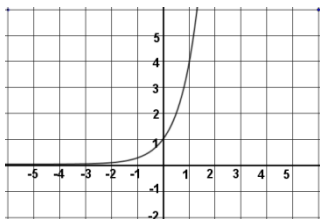**11.1 Intercepts Practice** (F.IF.4 and F.IF.7)

Find the x and y intercepts given the table or graph. Write your answer as an ordered pair.
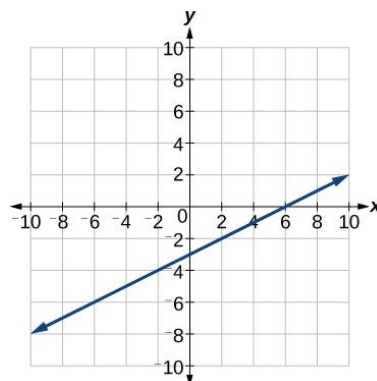
1.

X-intercepts:
Y-intercepts:

2.

X-intercepts:
Y-intercepts:

3.

X-intercepts:
Y-intercepts:

4.

x	y
0	2
3	1
6	0
9	-1

X-intercepts:
Y-intercepts:

5.

x	y
-1	-10
0	-8
1	-6
2	-4

X-intercepts:
Y-intercepts:

6.

x	y
-6	1
-5	2
-4	3
-3	4

X-intercepts:
Y-intercepts:

Find the x and y intercepts of **four** of the following equations. Write your answer as an ordered pair.

$y = 2x + 5$ $\qquad$ $y = -3x - 9$ $\qquad$ $3x = y - 12$ $\qquad$ $2x + 3y = 8$ $\qquad$ $4x - y = 6$

$4x - 2y = 8$

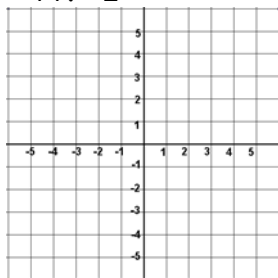| 7. Equation:	8. Equation:
X-intercepts: Y-intercepts:	X-intercepts: Y-intercepts:
9. Equation:	10. Equation:

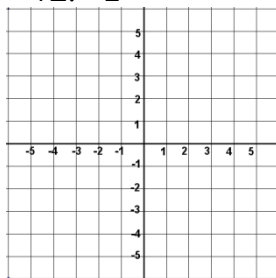|	
X-intercepts:	X-intercepts:
Y-intercepts:	Y-intercepts:

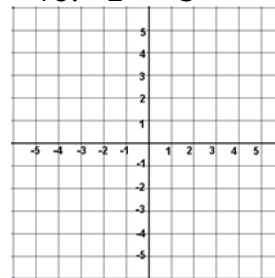Use a calculator to graph each exponential equation. Then estimate the x and y intercepts.
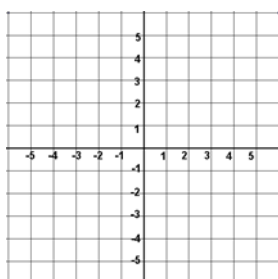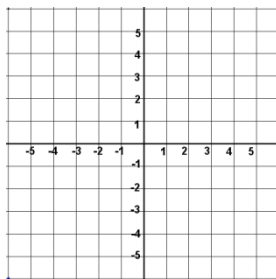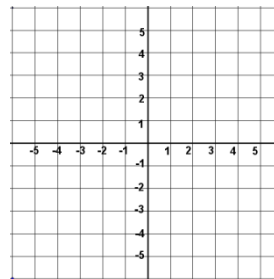
11. 2^x

12. 2^{x+3}

13. $2^x - 3$

14. 2^{-x}

15. -2^x

16. 4^x

BONUS (as in optional):

17. You receive $50 for your birthday and put it in a bank account. You add $5 a week.
    Y-intercept:
    Write a linear function for the amount you have after x weeks.

    Use your function to find when you will have $500 in the bank.

18. Jason has a golf score of 120. He is taking lessons and reduces his score by 3 strokes each week.
    Y-intercept:
    Write a linear function for the amount you have after x weeks.

    Use your function to find out when his score will be a 99.