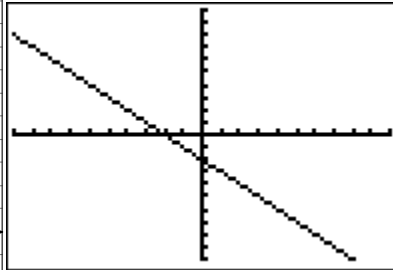1

A   Which graph best represents the graph of $y = -x - 2$?

Correct! The y–intercept is –2 and the slope is –1.
The calculator confirms that the points are on the graph.

B   Which graph best represents the graph of $y = -x - 2$?
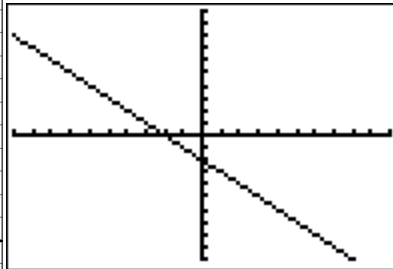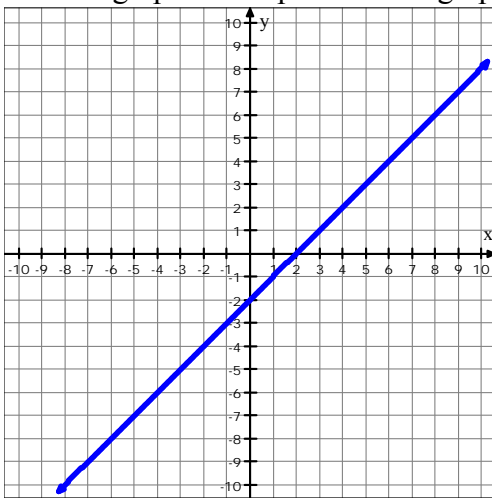
Incorrect, the y-intercept is –2 but the slope should be –1.
The line should be decreasing.

C   Which graph best represents the graph of $y = -x - 2$?
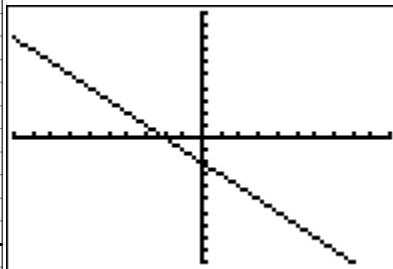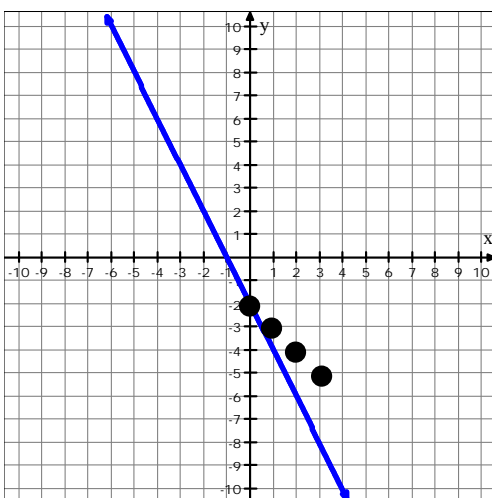
Incorrect, the graph has the correct y-intercept and is
decreasing but the points (1, –3), (2, –4), and (3, –5) are not
on the graph given.

D   Which graph best represents the graph of $y = -x - 2$?
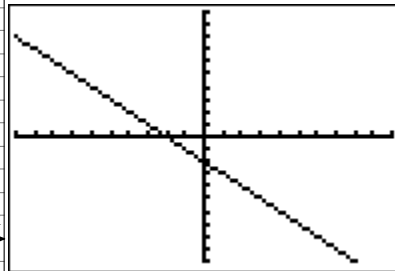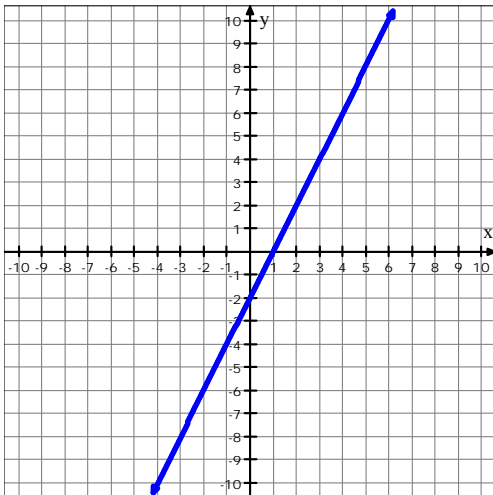
X	Y1	
-3	1	
-2	0	
-1	-1	
0	-2	
1	-3	
2	-4	
3	-5	

X= -3

Incorrect, the y-intercept is -2 but the slope should be -1. The line should be decreasing.
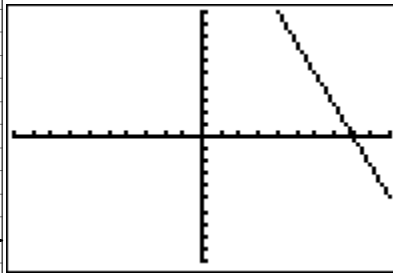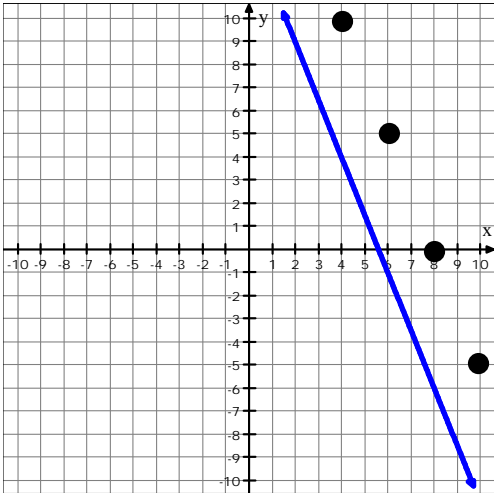
2

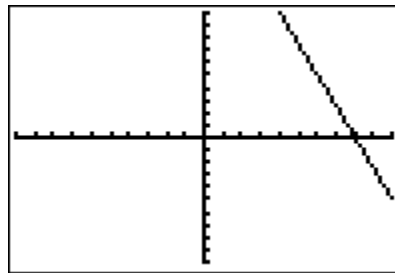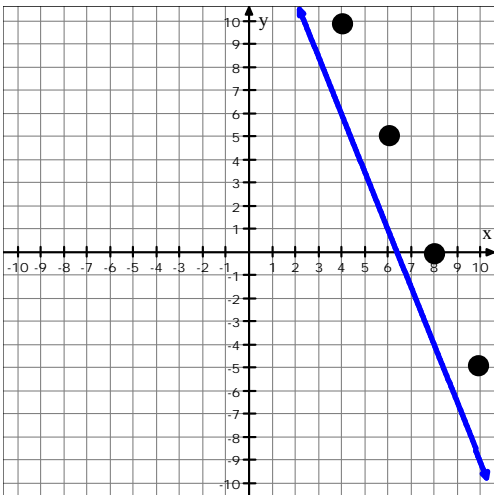**A** Which graph best represents the graph of $y = 20 - 2.50x$?

X	Y₁	
4	10	
5	7.5	
6	5	
7	2.5	
8	0	
9	-2.5	
10	-5	

X=10

Incorrect, it'll be best to check points on the graph.
According to the calculator the points $(4, 10)$, $(6, 5)$, $(8, 0)$
and $(10, -5)$ should be on the graph.

B Which graph best represents the graph of $y = 20 - 2.50x$?

X	Y₁	
4	10	
5	7.5	
6	5	
7	2.5	
8	0	
9	-2.5	
10	-5	

X=10

Incorrect, it'll be best to check points on the graph.
According to the calculator the points $(4, 10)$, $(6, 5)$, $(8, 0)$
and $(10, -5)$ should be on the graph.

C Which graph best represents the graph of $y = 20 - 2.50x$?

X	Y₁	
4	10	
5	7.5	
6	5	
7	2.5	
8	0	
9	-2.5	
10	-5	

X=10

Incorrect, it'll be best to check points on the graph.
According to the calculator the points $(4, 10)$, $(6, 5)$, $(8, 0)$
and $(10, -5)$ should be on the graph.

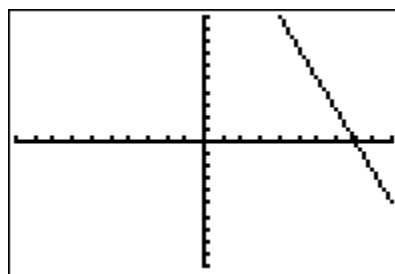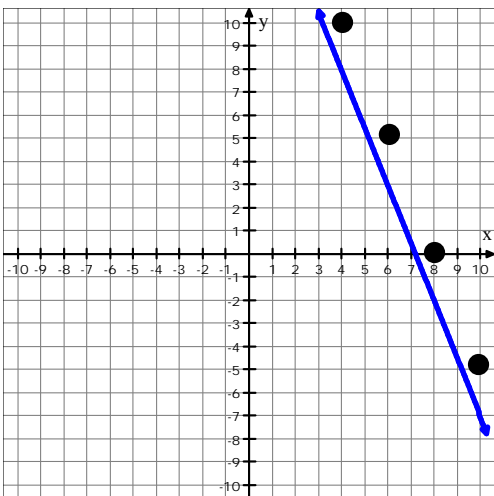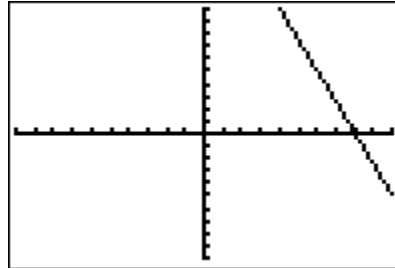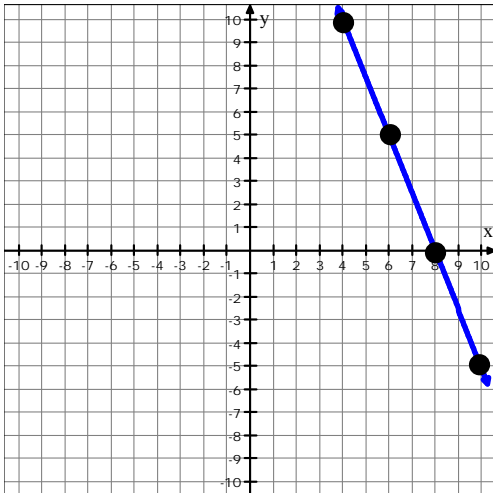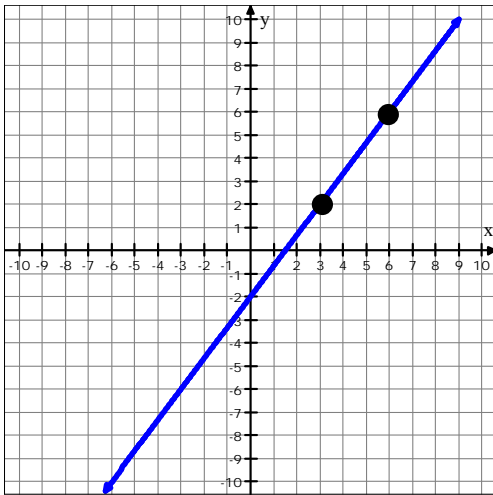**D**   Which graph best represents the graph of $y = 20 - 2.50x$?

X	Y₁
4	10
5	7.5
6	5
7	2.5
8	0
9	-2.5
10	-5

X=10

Correct! This is the only graph with the points (4, 10), (6, 5), (8, 0) and (10, −5).

3

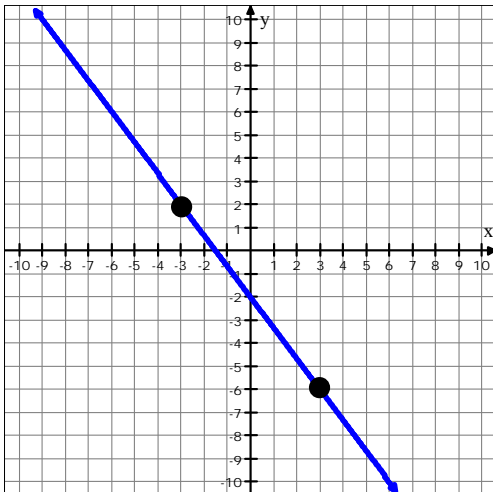**A**   Which graph best represents the graph of $-3x + 4y = -8$?

Incorrect, something went wrong.
Did you double check your points?
(3, 2) and (6, 6) are on this graph. But …

```
-3(3)+4(2)
                -1
-3(6)+4(6)
                 6
```

If **A** was the correct choice, all answers would equal -8.

B   Which graph best represents the graph of $-3x + 4y = -8$?
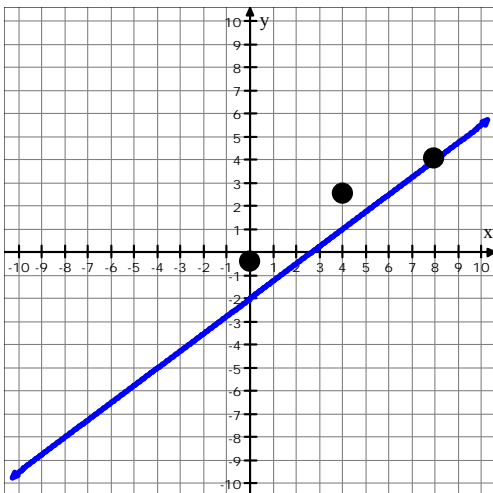

Incorrect, something went wrong.
Did you double check your points?
$(-3, 2)$ and $(3, -6)$ are on this graph. But …

```
-3(-3)+4(2)
                17
-3(3)+4(-6)
               -33
```

If **B** was the correct choice, all answers would equal -8.

C   Which graph best represents the graph of $-3x + 4y = -8$?
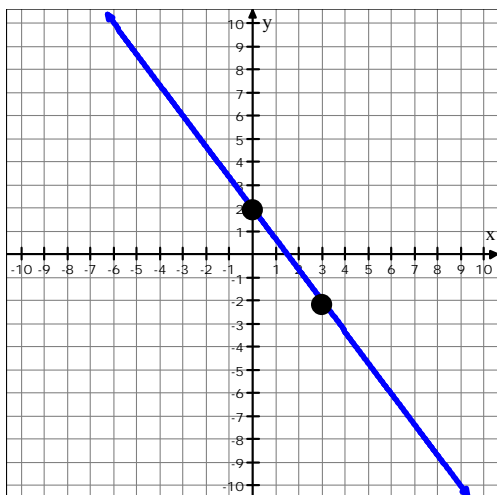

Correct!
$y = \dfrac{3}{4}x - 2$: y-intercept is -2 and slope of $\dfrac{3}{4}$.
Double checking the points $(0, -2)$, $(4, 1)$, and $(8, 4)$:

```
-3(0)+4(-2)
                -8
-3(4)+4(1)
                -8
-3(8)+4(4)
                -8
```

D   Which graph best represents the graph of $-3x + 4y = -8$?
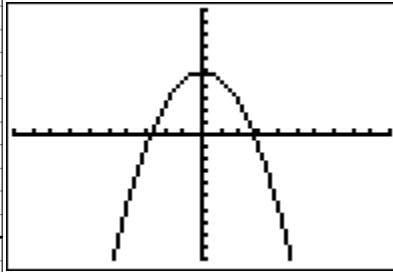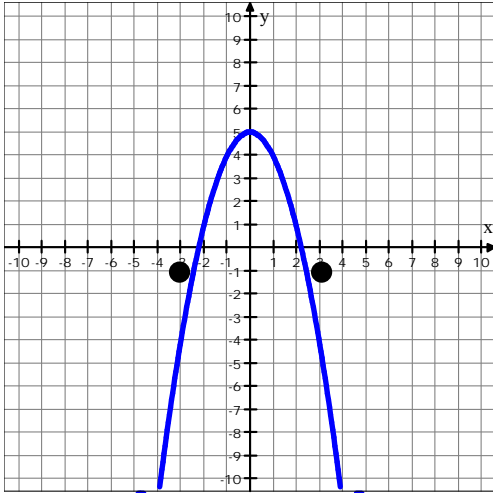

Incorrect, something went wrong.
Did you double check your points?
$(0, 2)$ and $(3, -2)$ are on this graph. But …

```
-3(0)+4(2)
                8
-3(3)+4(-2)
              -17
```

If **D** was the correct choice, all answers would equal -8.

4

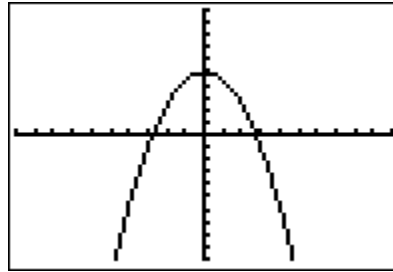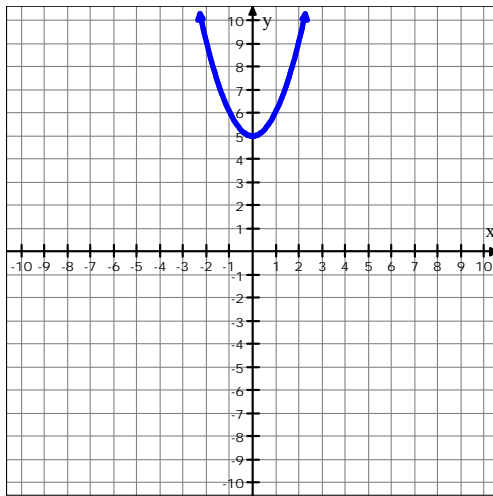**A** Which graph best represents the graph of $y = 5 - \dfrac{2}{3}x^2$?

X	Y1
-3	-1
-2	2.3333
-1	4.3333
0	5
1	4.3333
2	2.3333
3	-1

X= -3

Incorrect, this graph is close but $(-3, -1)$ and $(3, -1)$ are not on the graph.

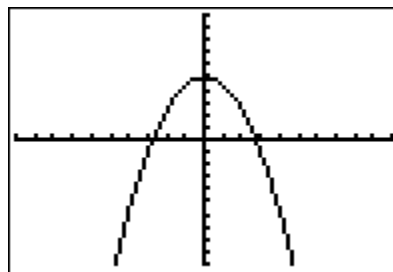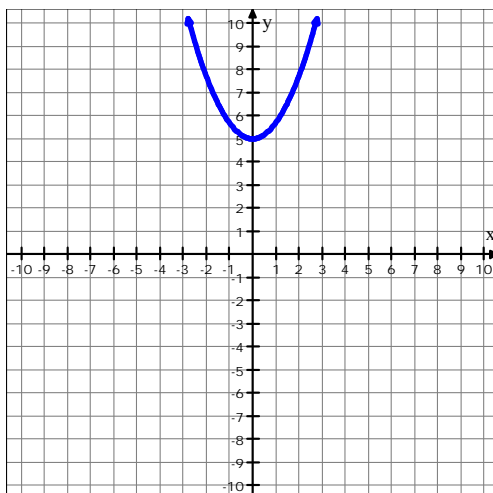**B** Which graph best represents the graph of $y = 5 - \dfrac{2}{3}x^2$?

X	Y1
-3	-1
-2	2.3333
-1	4.3333
0	5
1	4.3333
2	2.3333
3	-1

X= -3

Incorrect, the graph should open downward.

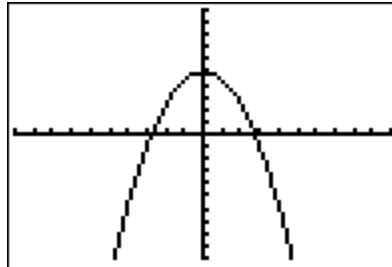**C** Which graph best represents the graph of $y = 5 - \dfrac{2}{3}x^2$?

X	Y1
-3	-1
-2	2.3333
-1	4.3333
0	5
1	4.3333
2	2.3333
3	-1

X= -3

Incorrect, the graph should open downward.

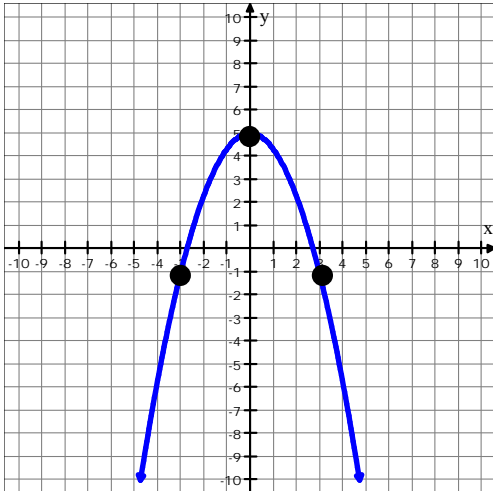**D** Which graph best represents the graph of $y = 5 - \dfrac{2}{3}x^2$?

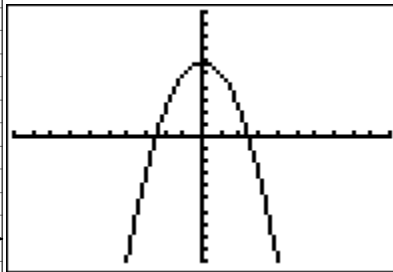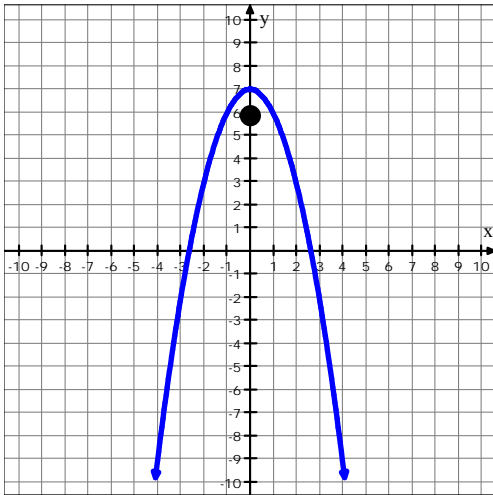| X	Y₁	
-3	-1	
-2	2.3333	
-1	4.3333	
0	5	
1	4.3333	
2	2.3333	
3	-1	

X= -3

Correct! Matching the points in the table makes this a question that is sure to be correct.

5

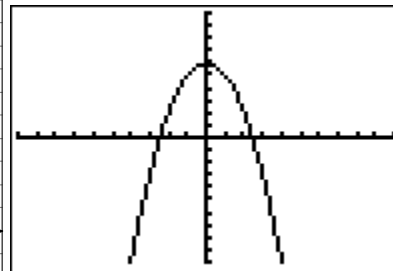**A**   Which graph best represents the graph of $f(x) = -x^2 + 6$?

Incorrect. This graph is close but (0, 6) is not on the graph.

B   Which graph best represents the graph of $f(x) = -x^2 + 6$?

Correct! Matching the points in the table makes this a question that is sure to be correct.

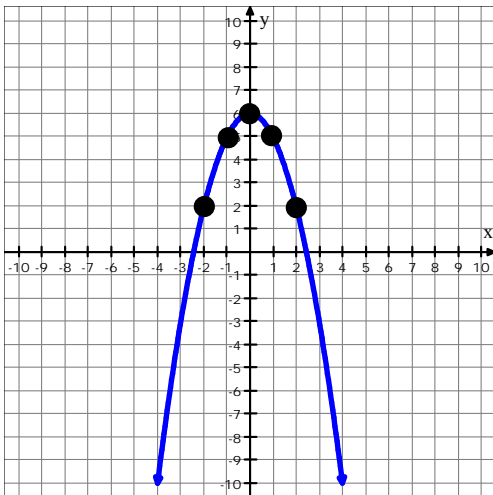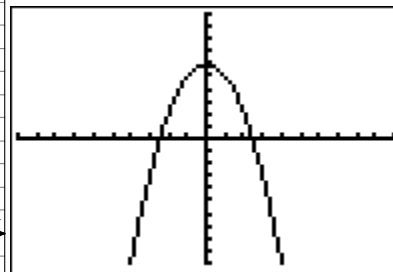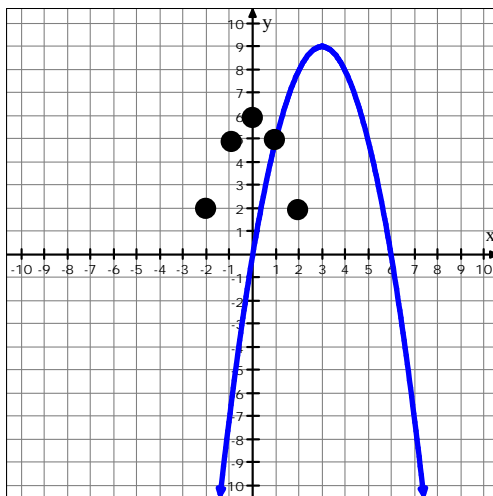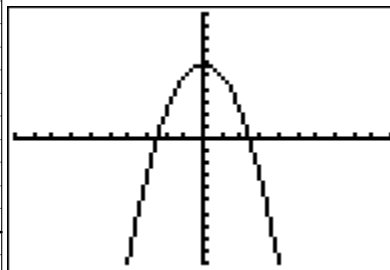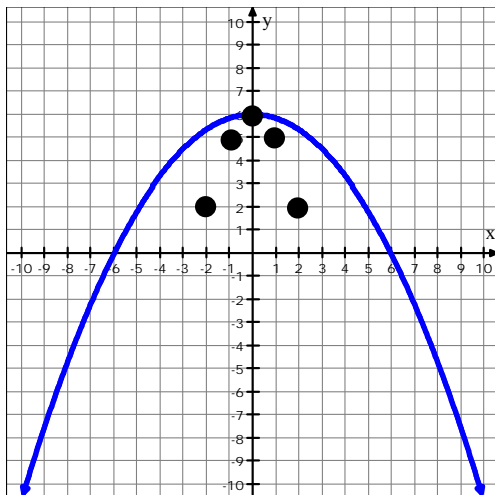**C**   Which graph best represents the graph of $f(x) = -x^2 + 6$?

Incorrect. The points (−2, 2), (−1, 5), (0, 6), (1, 5), and (2, 2) are not on the graph.

D   Which graph best represents the graph of $f(x) = -x^2 + 6$?

X	Y$_1$	
-3	-3	
-2	2	
-1	5	
0	6	
1	5	
2	2	
3	-3	

X= -3

Incorrect. The points $(-2, 2)$, $(-1, 5)$, $(0, 6)$, $(1, 5)$, and $(2, 2)$ are not on the graph.

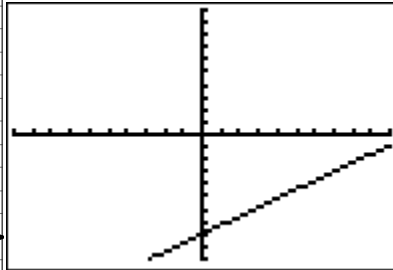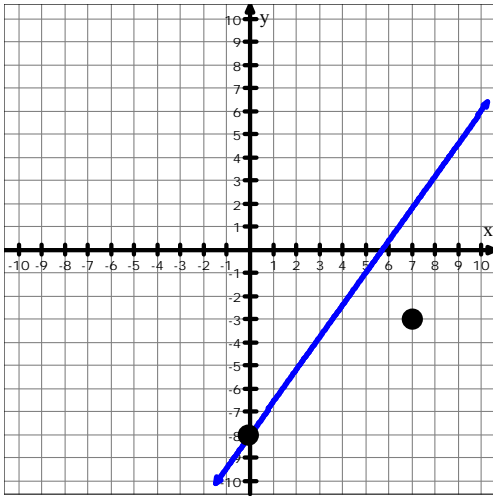1

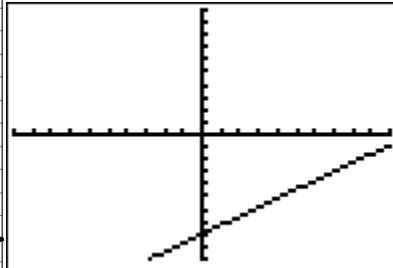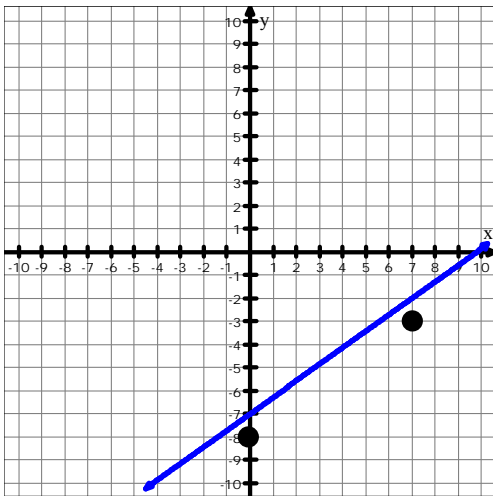**A**   Which graph best represents the graph of $y = \dfrac{5}{7}x - 8$?

Incorrect, the y-intercept is correct but the slope of this graph is not $\dfrac{5}{7}$. Also, the points $(0, -8)$ AND $(7, -3)$ should be on this graph.

B   Which graph best represents the graph of $y = \dfrac{5}{7}x - 8$?

Incorrect, the y-intercept is incorrect. Also, the points $(0, -8)$ and $(7, -3)$ should be on this graph.

C   Which graph best represents the graph of $y = \dfrac{5}{7}x - 8$?

Incorrect, the y-intercept is incorrect. Also, the points $(0, -8)$ and $(7, -3)$ should be on this graph.

D   Which graph best represents the graph of $y = \dfrac{5}{7}x - 8$?
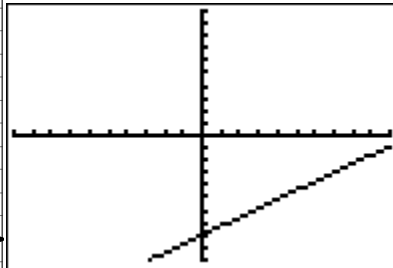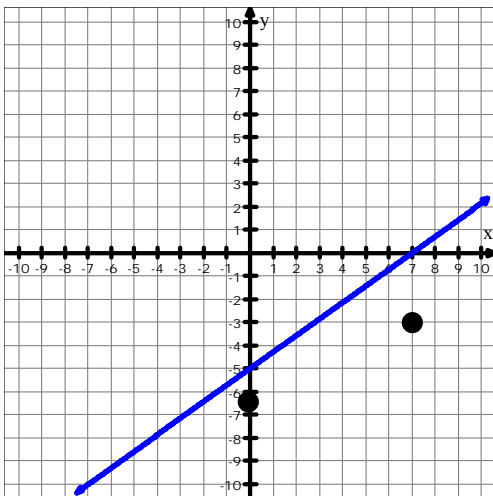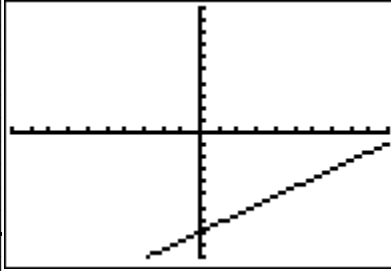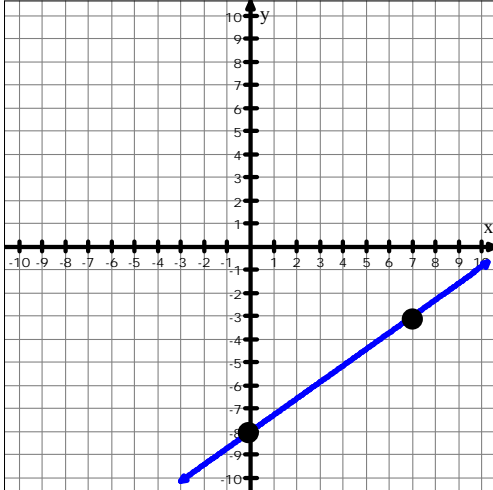

X	Y1
0	-8
1	-7.286
2	-6.571
3	-5.857
4	-5.143
5	-4.429
6	-3.714
7	-3

X=1

Correct! The *y*-intercept is −8 and the graph moves up 5 and right 7. Also, the calculator tells you the points (0, −8) and (7, −3) should be on this graph. It's always smart to double check.

2

A   Which graph best represents the graph of $y = \dfrac{4}{7}x + 2$?

Correct! The *y*-intercept is 2 and the graph moves up 4 and right 7. Also, the calculator tells you the points (0, 2) and (7, 6) should be on this graph. It's always smart to double check.

B   Which graph best represents the graph of $y = \dfrac{4}{7}x + 2$?

Incorrect, the *y*-intercept is correct but the slope of this graph is not $\dfrac{4}{7}$ (this line is decreasing). Also, the points (0, 2) AND (7, 6) should be on this graph.

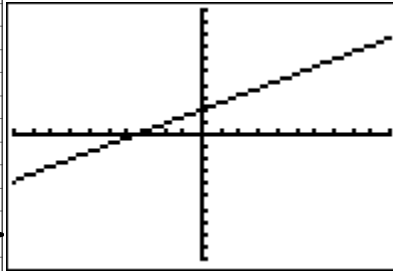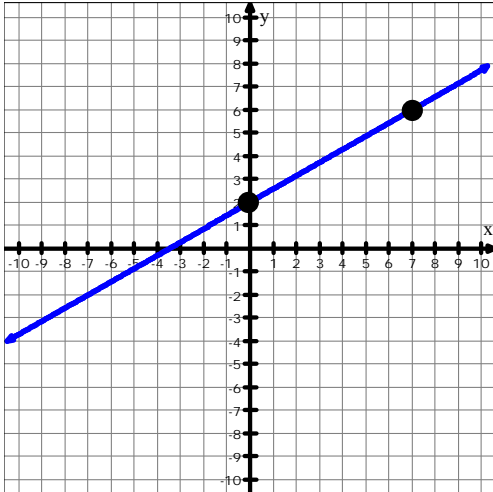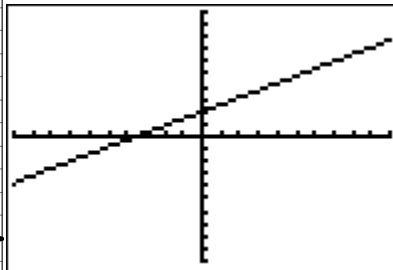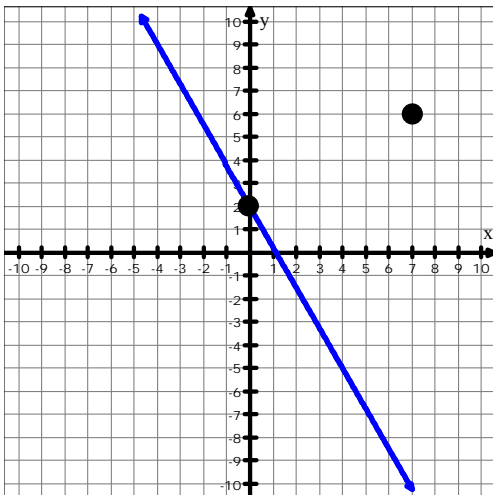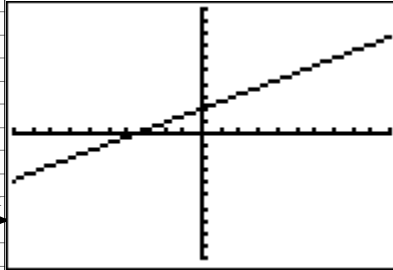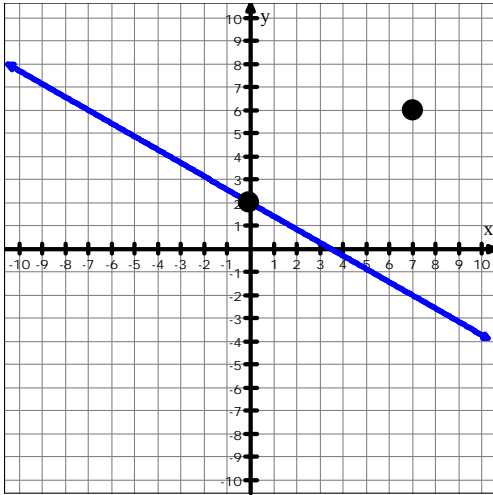**C**   Which graph best represents the graph of $y = \dfrac{4}{7}x + 2$?

X	Y₁
0	2
1	2.5714
2	3.1429
3	3.7143
4	4.2857
5	4.8571
6	5.4286
7	6

X=7

Incorrect, the *y*-intercept is correct but the slope of this graph is not $\dfrac{4}{7}$ (this line is decreasing). Also, the points (0, 2) AND (7, 6) should be on this graph.

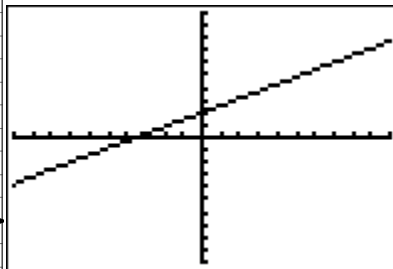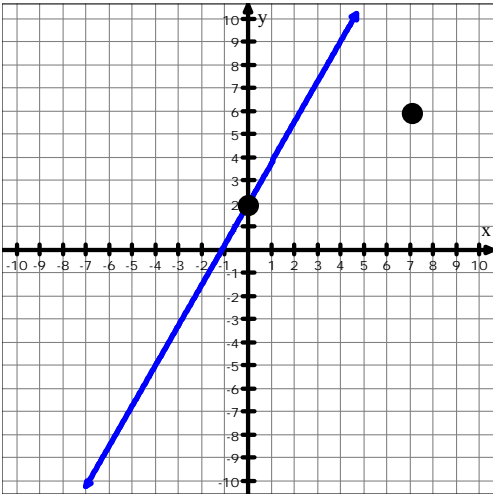**D**   Which graph best represents the graph of $y = \dfrac{4}{7}x + 2$?

X	Y₁
0	2
1	2.5714
2	3.1429
3	3.7143
4	4.2857
5	4.8571
6	5.4286
7	6

X=7

Incorrect, the *y*-intercept is correct but the slope of this graph is not $\dfrac{4}{7}$ (It's $\dfrac{7}{4}$). Also, the points (0, 2) AND (7, 6) should be on this graph.

3

A   Which graph best represents the graph of $6x + 5y = -15$?
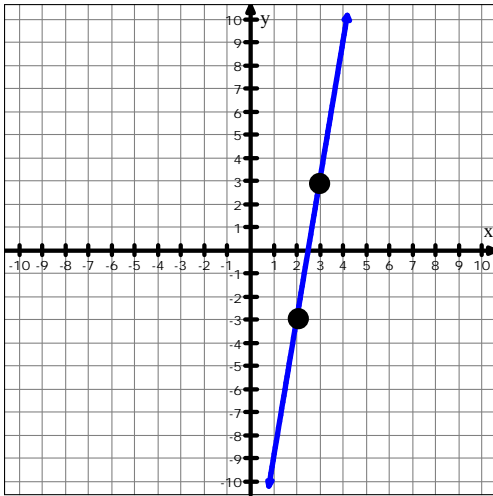
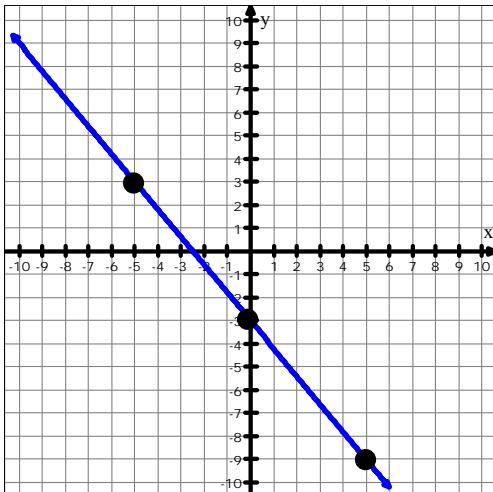Incorrect, something went wrong.
Did you double check your points?
$(2, -3)$ and $(3, 3)$ are on this graph. But …

```
6(2)+5(-3)
              -3
6(3)+5(3)
              33
```

If **A** was the correct choice, all answers would equal **−15**.

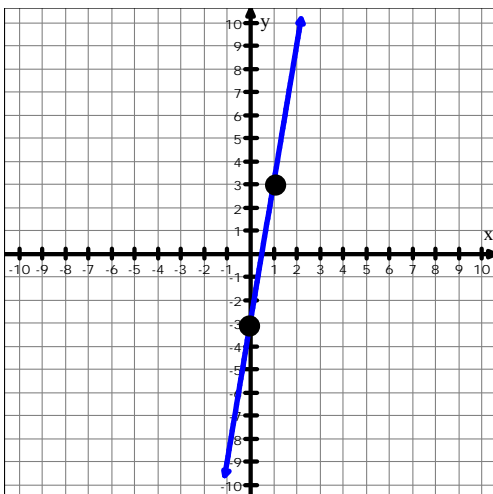**B**   Which graph best represents the graph of $6x + 5y = -15$?

Correct!
$y = -\dfrac{6}{5}x - 3$: y-intercept is -3 and slope of $-\dfrac{6}{5}$
Double checking the points $(-5, 3)$, $(0, -3)$, and $(5, -9)$:

```
6(-5)+5(3)
              -15
6(0)+5(-3)
              -15
6(5)+5(-9)
              -15
```

C   Which graph best represents the graph of $6x + 5y = -15$?
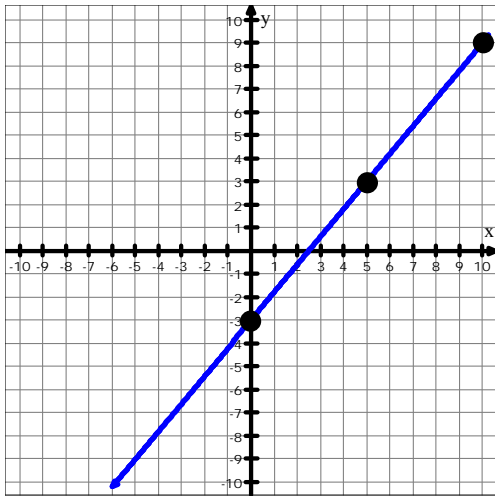

Incorrect, something went wrong.
Did you double check your points?
$(0, -3)$ and $(1, 3)$ are on this graph. But …

```
6(0)+5(-3)
              -15
6(1)+5(3)
              21
```

If **C** was the correct choice, **both** answers would equal **−15**.

D Which graph best represents the graph of $6x + 5y = -15$?
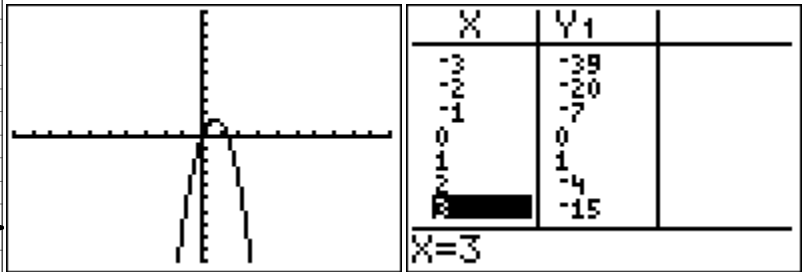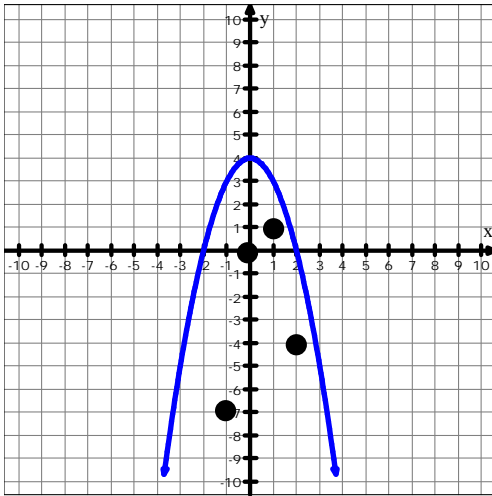

Incorrect, something went wrong.
Did you double check your points?
$(0, -3)$, $(5, 3)$, and $(10, 8)$ are on this graph. But …

```
6(0)+5(-3)
                -15
6(5)+5(3)
                 45
6(10)+5(8)
                100
```

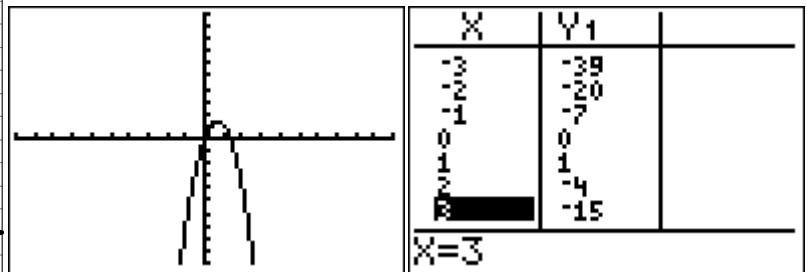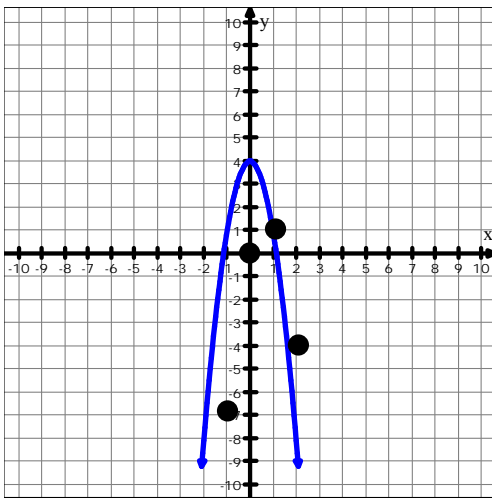If **D** was the correct choice **ALL** answers would equal −**15**.

4

A   Which graph best represents the graph of $y = -3x^2 + 4x$?

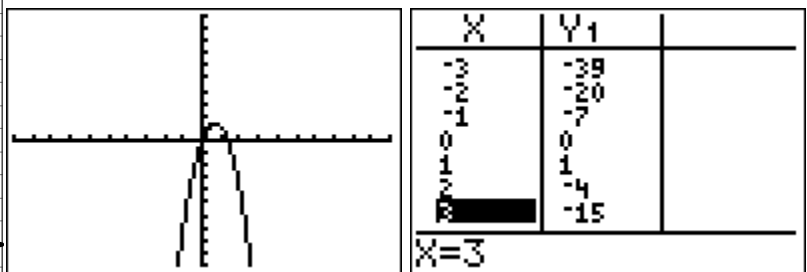| X	Y1
-3	-39
-2	-20
-1	-7
0	0
1	1
2	-4
3	-15

X=3

Incorrect, the points are not matching the graph.

B   Which graph best represents the graph of $y = -3x^2 + 4x$?

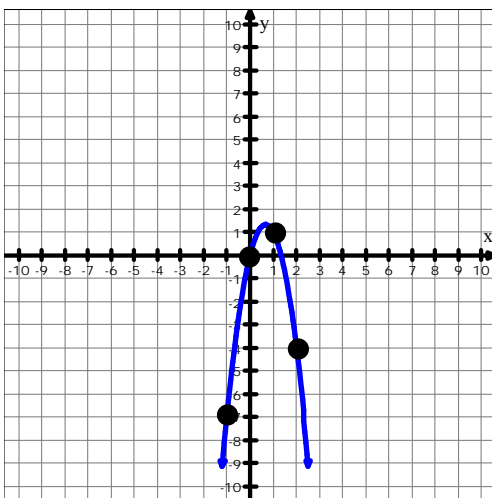| X	Y1
-3	-39
-2	-20
-1	-7
0	0
1	1
2	-4
3	-15

X=3

Incorrect, the points are not matching the graph.

C   Which graph best represents the graph of $y = -3x^2 + 4x$?

X	Y1
-3	-39
-2	-20
-1	-7
0	0
1	1
2	-4
3	-15

X=3

Correct! The points on the graph match the calculator.

D   Which graph best represents the graph of $y = -3x^2 + 4x$?

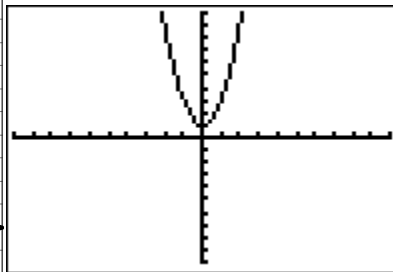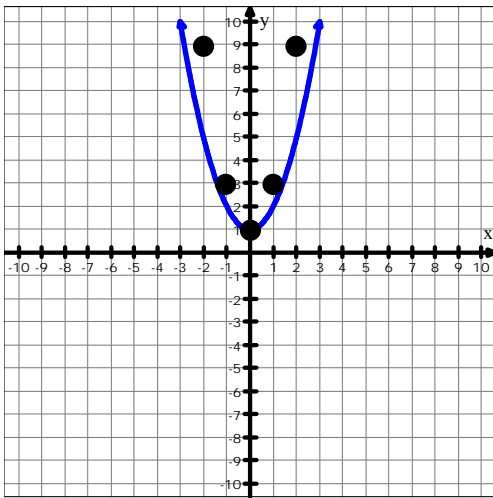| X	Y$_1$
-3	-39
-2	-20
-1	-7
0	0
1	1
2	-4
3	-15

X=3
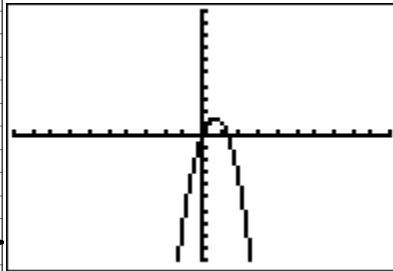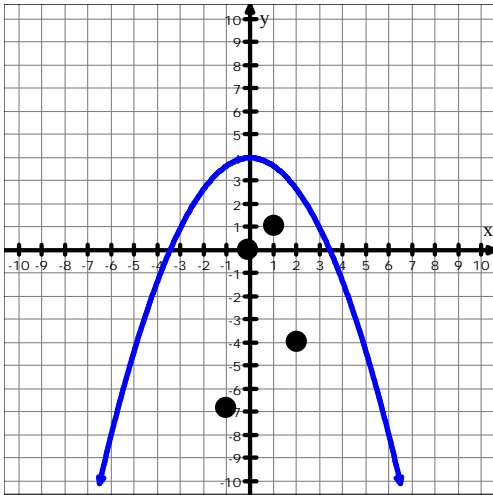
Incorrect, the points are not matching the graph.

5

A Which graph best represents the graph of $y = 2x^2 + 1$?

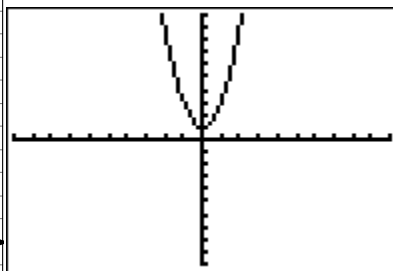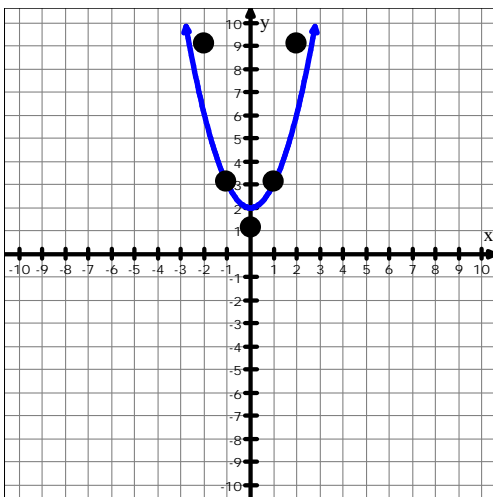| X	Y₁
-3	19
-2	9
-1	3
0	1
1	3
2	9
3	19

X=-3

Incorrect, the points are not matching the graph.

B Which graph best represents the graph of $y = 2x^2 + 1$?

X	Y₁
-3	19
-2	9
-1	3
0	1
1	3
2	9
3	19

X=-3

Incorrect, the points are not matching the graph.

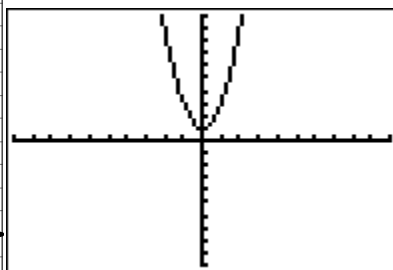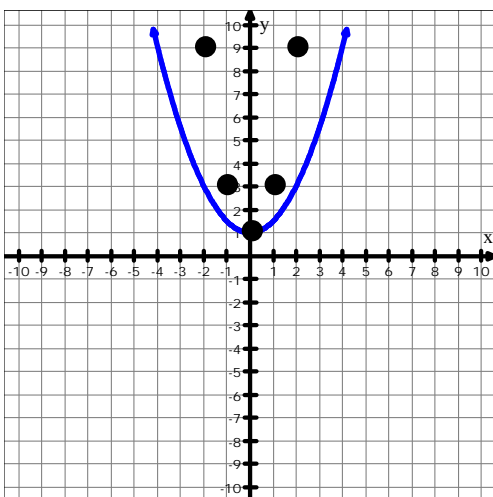**C** Which graph best represents the graph of $y = 2x^2 + 1$?

X	Y₁
-3	19
-2	9
-1	3
0	1
1	3
2	9
3	19

X=-3

Incorrect, the points are not matching the graph.

D   Which graph best represents the graph of $y = 2x^2 + 1$?

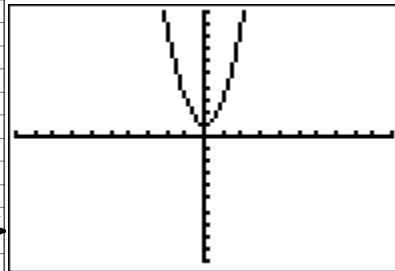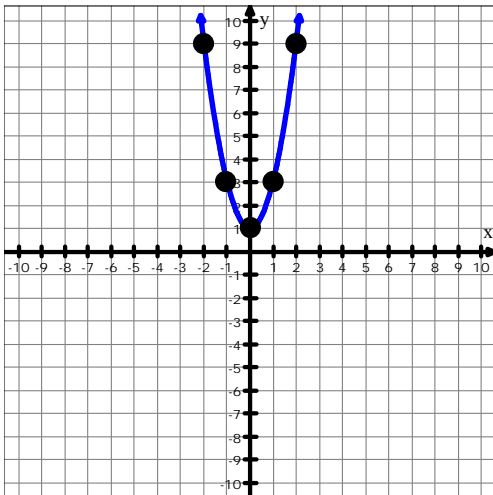| X	Y₁
-3	19
-2	9
-1	3
0	1
1	3
2	9
3	19

X= -3

Correct! The points on the graph match the calculator.