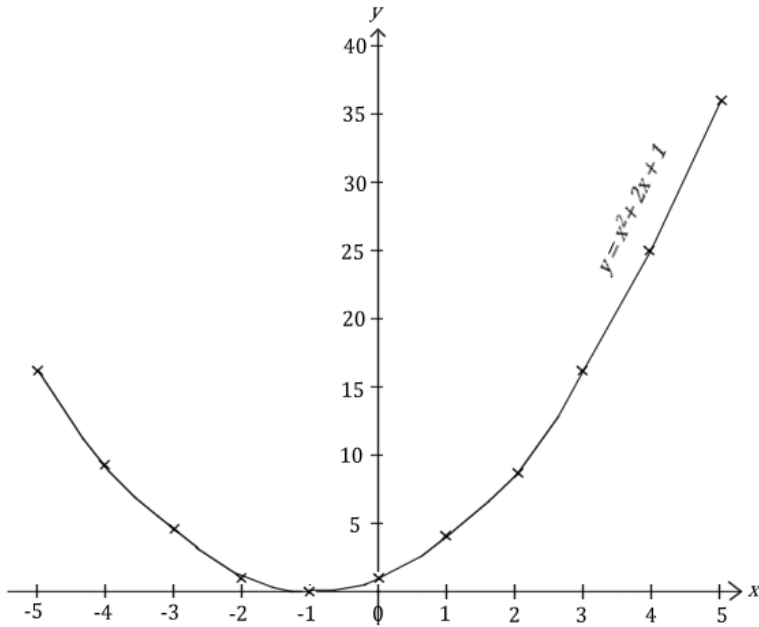


Drawing Graphs of Quadratic (2nd Order) Equations – ANSWERS

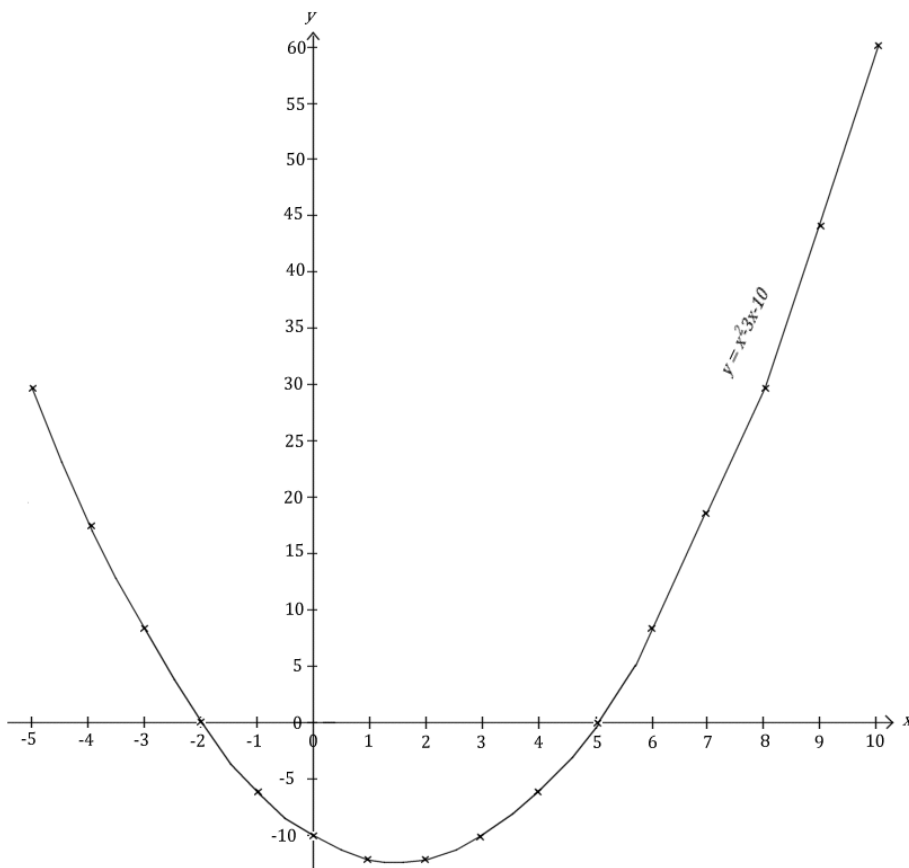
1.

x	-5	-4	-3	-2	-1	0	1	2	3	4	5
x^2	25	16	9	4	1	0	1	4	9	16	25
$2x$	-10	-8	-6	-4	-2	0	2	4	6	8	10
$y = x^2 + 2x + 1$	16	9	4	1	0	1	4	9	16	25	36



2.

x	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
x^2	25	16	9	4	1	0	1	4	9	16	25	36	49	64	81	100
$-3x$	15	12	9	6	3	0	-3	-6	-9	-12	-15	-18	-21	-24	-27	-30
$y = x^2 - 3x - 10$	30	18	8	0	-6	-10	-12	-12	-10	-6	0	8	18	30	44	60

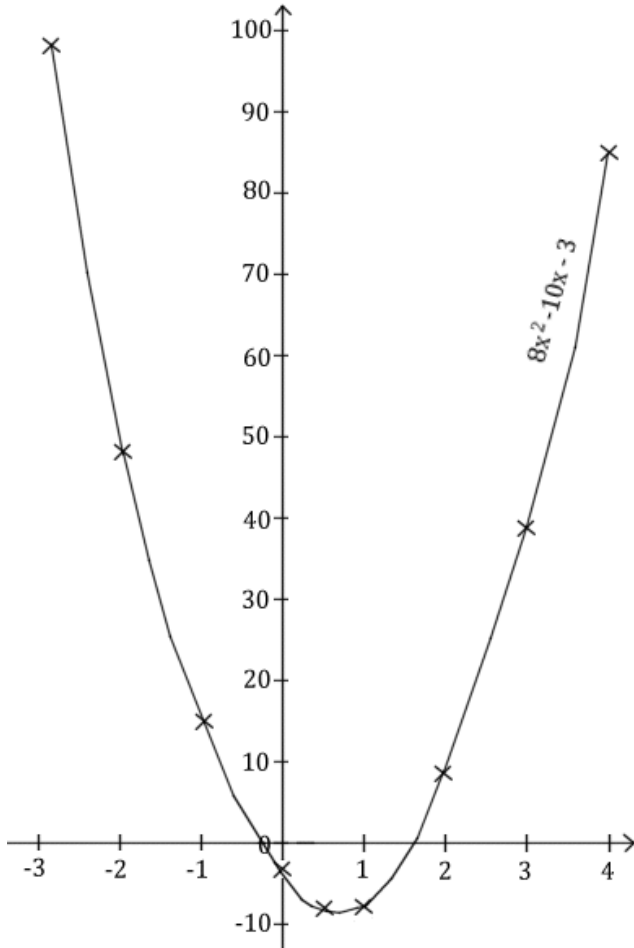


3.

(Extra point)

x	-3	-2	-1	0	1	2	3	4
$8x^2$	72	32	8	0	6	32	72	128
$-10x$	30	20	10	0	-10	-20	-30	-40
$y = 8x^2 - 10x - 3$	99	49	15	-3	-7	9	39	85

0.5
0.25
-5.0
-7.75



Note the extra point plotted at (0.5, -7.75) to determine where the line should go at the bottom of the curve.