

Key

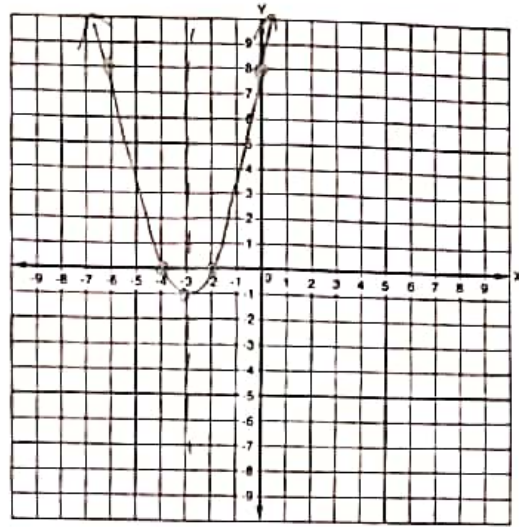
4.6 Practice- Vertex and Factored form practice

Change the equations from standard form to either vertex form or factored form (your choice but you must do at least one of each!). Then graph.

1. $y = x^2 + 6x + 8$

New form: $y = (x+4)(x+2)$ or

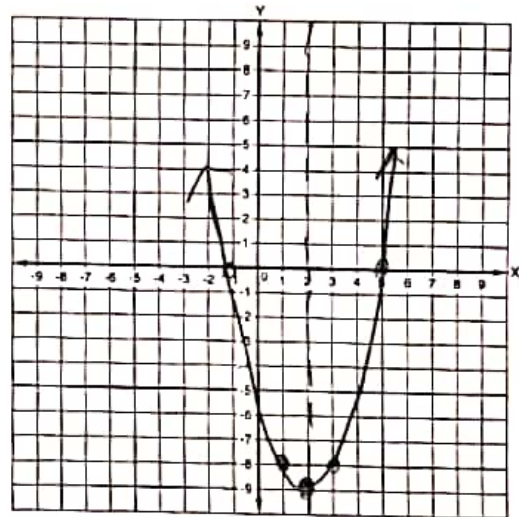
Vertex: $(-3, -1)$ $y = (x+3)^2 - 1$



2. $y = x^2 - 4x - 5$

New form: $y = (x-5)(x+1)$ or

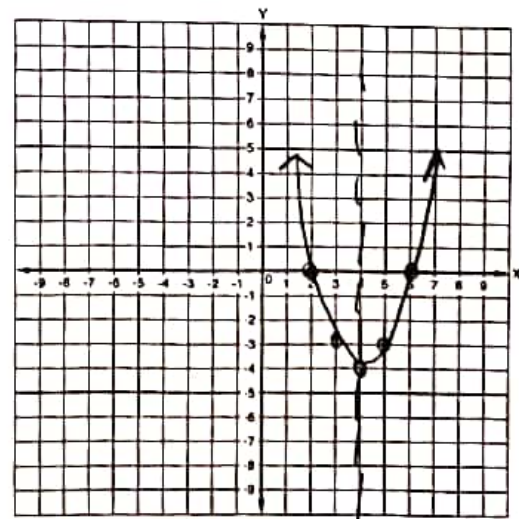
Vertex: $y = (x-2)^2 - 9$



3. $f(x) = x^2 - 8x + 12$

New form: $y = (x-6)(x-2)$ or

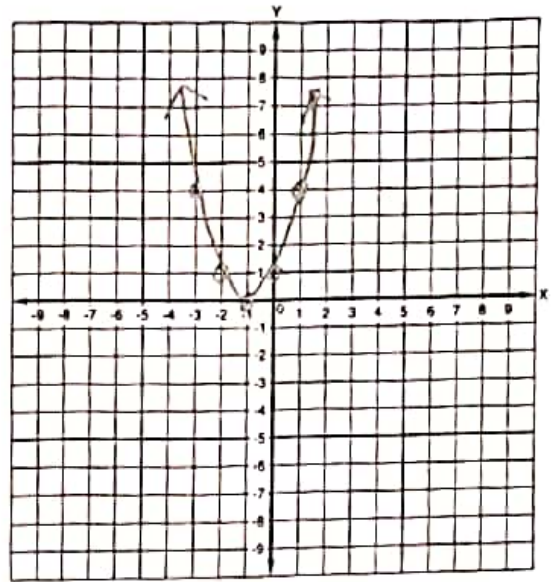
Vertex: $y = (x-4)^2 - 4$



4. $y = x^2 + 2x + 1$

New form: $y = (x+1)(x+1)$ or

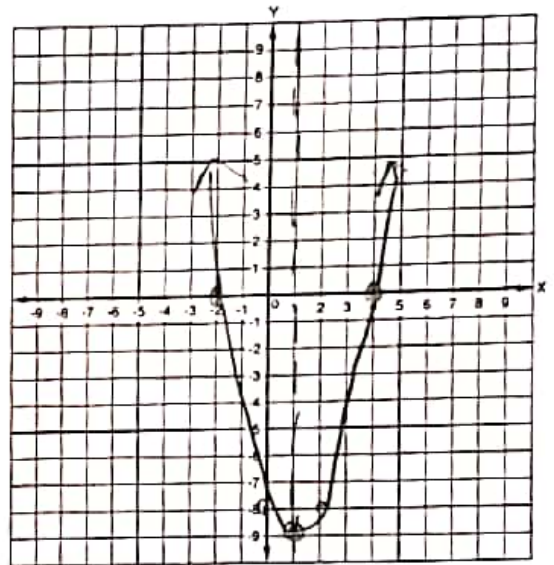
Vertex: $(-1, 0)$ $y = (x+1)^2$



5. $y = x^2 - 2x - 8$

New form: $y = (x-4)(x+2)$ or

Vertex: $(1, -9)$ $y = (x-1)^2 - 9$



6. $f(x) = x^2 - 10x + 21$

New form: $y = (x-7)(x-3)$ or

Vertex: $y = (x-5)^2 - 4$

