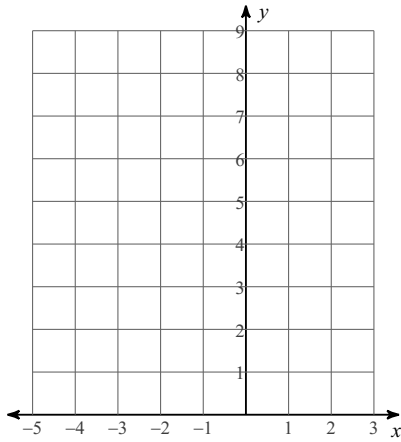


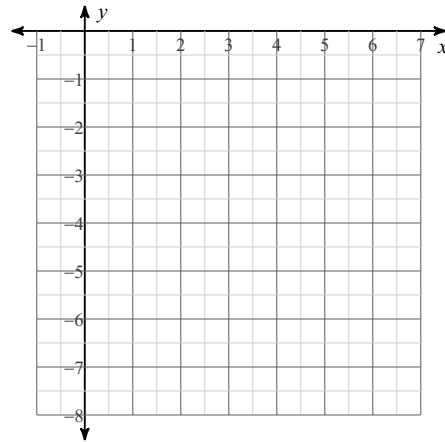
10.5 Worksheet

Sketch the graph of each function.

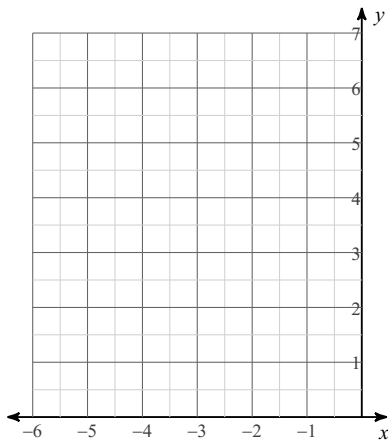
1) $y = x^2 + 4x + 8$



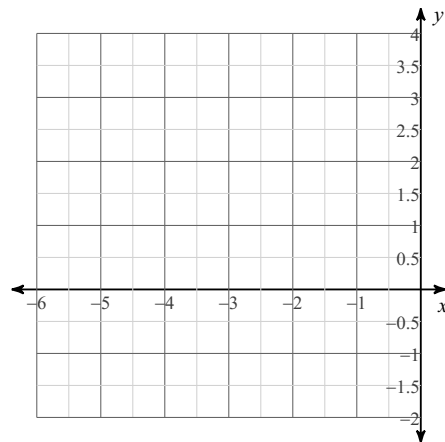
2) $y = -x^2 + 2x - 4$



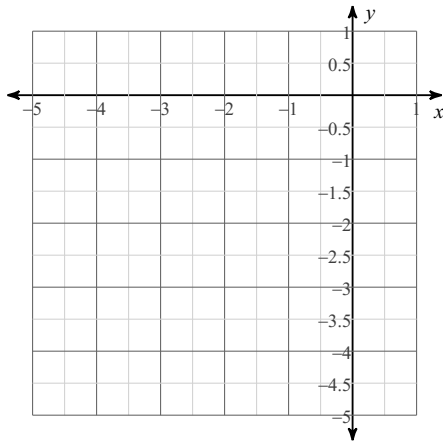
3) $y = x^2 + 4x + 6$



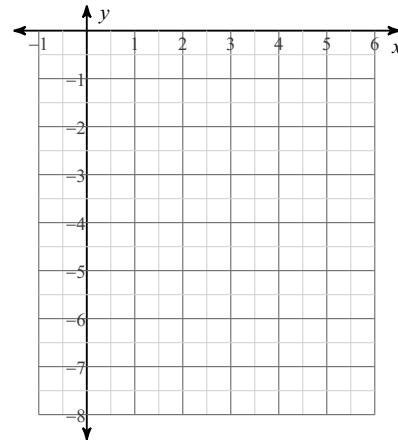
4) $y = x^2 + 6x + 8$



5) $y = x^2 + 2x - 3$



6) $y = -x^2 + 8x - 19$



Convert the following quadratics from standard form to vertex form.

7) $x^2 + 14x - 95 = 0$

8) $b^2 - 6b + 5 = 0$

9) $r^2 + 20r + 81 = 0$

10) $b^2 + 18b + 77 = 0$

11) $b^2 - 8b + 15 = 0$

12) $n^2 + 20n + 99 = 0$

Convert the following quadratics from vertex form to standard form

13) $y = 2(x + 4)^2 - 3$

14) $y = (x + 3)^2 - 2$

15) $y = (x + 4)^2 + 2$