Solutions

1. $(x-5)^2 + 74$

2. $(x+9)^2 - 83$

3. $\left(x - \frac{3}{2}\right)^2 + \frac{11}{4}$

4. $-(x-2)^2 + 8$

5. $-(x+6)^2 + 29$

6. $-\left(x - \frac{1}{2}\right)^2 + \frac{5}{4}$

7. $2(x+1)^2 + 4$

8. $3(x-2)^2 - 17$

9. $4\left(x + \frac{5}{8}\right)^2 - \frac{71}{16}$

10. $-9(x-1)^2 + 10$

11. $-10(x+2)^2 + 40$

12. $-2\left(x + \frac{3}{4}\right)^2 - \frac{7}{8}$

13. $\frac{1}{2}(x-1)^2 + \frac{1}{2}$

14. $-\frac{1}{3}(x-3)^2 - 2$

15. $-\frac{2}{5}\left(x + \frac{15}{2}\right)^2 + \frac{25}{2}$