

HW 7D

$$\left(\frac{b}{2}\right)^2$$

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

2. 1 $(x-1)^2$

3. $(-6/2)^2 = 9$ $(x-3)^2$

4. $(8/2)^2 = 16$ $(x+4)^2$

5. 25 $(x-5)^2$

6. 4 $(x+2)^2$

7. 36 $(x+6)^2$

8. $(-14/2)^2 = 49$ $(x-7)^2$

9. 324 $(x+18)^2$

10. $(-64/2)^2 = 1024$ $(x-32)^2$

11. $f(x) = (x^2 - 16x + \underline{\quad}) + 6 - \underline{\quad}$

$$= (x^2 - 16x + 64) + 6 - 64$$

$$\boxed{f(x) = (x-8)^2 - 58}$$

12. $f(x) = (x^2 + 2x + \underline{1}) + 8 - \underline{1}$

$$\boxed{f(x) = (x+1)^2 + 7}$$

13. $f(x) = (x^2 - 20x + \underline{\quad}) + 4 - \underline{\quad}$

$$= (x^2 - 20x + 100) + 4 - 100$$

$$\boxed{f(x) = (x-10)^2 - 96}$$

14. $f(x) = (x^2 + 12x + \underline{\quad}) - 9 - \underline{\quad}$

$$f(x) = (x^2 + 12x + 36) - 9 - 36$$

$$\boxed{f(x) = (x+6)^2 - 45}$$