4
$$F(x) = 4e^x - x^2 + C$$
.
 $G(x) = x^3 + 5e^x + C$.

6
$$F(x) = x^3 + \frac{4}{x} + C.$$

 $G(x) = x - \frac{2}{x} + \frac{1}{3x^3} + C.$

7
$$F(t) = \frac{t^2}{2} + 2 \ln t + C.$$

$$G(t) = 3e^t + 5 \ln t + C.$$

$$F(x) = e^{2x}$$

9
$$F(x) = e^{2x} + C$$
.

$$F(x) = \frac{x^2}{2} - \frac{4}{3} e^{-3x} + C.$$

On a $f = e^u \times u'$ avec $u(x) = x^2$

12
$$F(x) = \frac{x^2}{2} - \frac{4}{3} e^{-3x} + C.$$

d'où $F(x) = e^{u(x)} + C = e^{x^2} + C$.