[6] **8.** Evaluate the following integrals [accurate to 2 decimals].

(a) $\int_0^4 (t^3 - 2)\, dt$

(b) $\int_3^4 e^{-x^2}\, xdx$

[12] **9.** Compute the following:

(a) $\int (4+x)^{-4}\ dx$

(b) $\int e^{7x}\,dx$

(c) $\int \frac{x+7}{\sqrt{x}}\,dx$

(d) $\int (7x^2 - 3x^3)\,dx$

(e) $\int \frac{x^2}{5+x^3}\,dx$

(f) $\int (x^2+1)^{-4}x\,dx$

[12] **10.** Find the area bounded by $f(x) = 4 - 2x$ and $g(x) = 2x^2$ for $-2 \leq x \leq 2$.

[13] **11.** Follow the graphing strategy and analyze the function $f(x) = \frac{3x}{(1-x)}$. State all the pertinent information and sketch the graph of f.