Homework Math 140
To be quizzed Thursday May 2.

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Problem 1 *(page 273) Find the most general antiderivative of the function.*

1. $f(x) = x - 3$.
2. $f(x) = \frac{1}{2}x^2 - 2x + 6$.
3. $f(x) = \frac{1}{2} + \frac{3}{4}x^2 - \frac{4}{5}x^3$.
4. $f(x) = 8x^9 - 3x^6 + 12x^3$.
5. $f(x) = (x+1)(2x-1)$.
6. $f(x) = x(2-x)^2$.
7. $f(x) = 7x^{2/5} + 8x^{-4/5}$.
8. $f(x) = x^{3.4} - 2x^{\sqrt{2}-1}$.
9. $f(x) = \sqrt{2}$.
10. $f(x) = \pi^2$.
11. $f(x) = \frac{10}{x^9}$.
12. $f(x) = \frac{5-4x^3+2x^6}{x^6}$.
13. $g(t) = \frac{1+t+t^2}{\sqrt{t}}$.
14. $f(x) = 3\cos t - 4\sin t$.
15. $f(\theta) = 2\sin\theta - \sec^2\theta$.
16. $f(\theta) = 6\theta^2 - 7\sec^2\theta$.
17. $f(t) = 2\sec t\tan t + \frac{1}{2}t^{-1/2}$.
18. $f(x) = 2\sqrt{x} + 6\cos x$.