Quiz 2 for the 10am class is on Thursday Sept 19; it covers §7.3, trig substitution

Quiz 2 for the 11am class is on Thursday Sept 26; it covers §7.4, IQ and partial fractions.

Book

7.4 Page 501 1, 3, 9, 15, 19, 21, 29, 31
9.1 Page 590 1, 3, 5, 9, 11a
9.3 Page 605 1, 3, 9, 11, 21

This Week

Monday: We'll finish Integrating Factors, §9.3
Tuesday: you'll work on IQ and partial fractions.
Wednesday: I'll start on §9.5, linear equations
Thursday: Everyone will take a quiz over §7.3; only the 10am class will be graded. Then everyone will work on integrating factors.
Friday: I'll finish ODE, start on improper integrals §7.8

Quiz 2
10am
Practice

1) \[ \int \sqrt{1 + x^2} \, dx \]
2) \[ \int \sqrt{1 - x^2} \, dx \]
3) \[ \int \sqrt{x^2 - 1} \, dx \]
4) \[ \int \frac{1}{\sqrt{1 + x^2}} \, dx \]
5) \[ \int x^2 \sqrt{1 - x^2} \, dx \]
6) \[ \int \frac{1}{(1 - x^2)^{\frac{3}{2}}} \, dx \]
7) \[ \int \frac{x^2}{\sqrt{x^2 - 1}} \, dx \]

DiffEq Practice

Integrating Factors:

1) \[ y' = -3y + 2e^{-x} \]
2) \[ y' - xy = x \]
3) \[ y' = -\frac{y}{x} + \sin(x) \]
4) \[ y' - y + x = 0 \]
5) \[ \frac{\cos(x)}{\sin(x)} y' + y = \sin(x) \]