5.8:   1, 2, 5, 6, 10, 19, 20, 27, 32

5.9:   1, 2, 4, 6, 9, 12, 16, 18, 19

5.10:   1, 2, 3, 5, 7, 11, 13, 15, 19, 21, 25, 26, 33, 37, 39, 45

5.8:

1:
$$\int \tan^3 \pi x \, dx = \frac{1}{2} \tan^2 \pi x - \ln|\pi x| + C$$

2:
$$\int e^{2\theta} \sin 3\theta \, d\theta = \frac{e^{2\theta}}{13} \cdot (2 \sin 3\theta - 3 \sin 3\theta)$$