

Section 7.3: Additional Problems

1.
$$\int \frac{x^3}{\sqrt{x^2 + 25}} dx$$

2.
$$\int \frac{1}{x^2 \sqrt{25x^2 + 16}} dx$$

3.
$$\int \frac{1}{(1 + x^2)^2} dx$$

4.
$$\int x^3 \sqrt{4 - 9x^2} dx$$

5.
$$\int \frac{\sqrt{4x^2 - 9}}{x} dx$$

$$6. \int \frac{4}{(6x - x^2)^{3/2}} dx$$

7.
$$\int \frac{1}{\sqrt{9x^2 + 18x + 13}} dx$$

8.
$$\int \frac{x^2}{(4x - x^2 - 3)^{3/2}} dx$$
 Note: this problem is slightly above the level of an exam question.