Sustitución trigonométrica.

$$37. - \int \frac{x^3 \, dx}{\sqrt{3x^2 - 5}}$$

$$38. - \int \frac{dx}{x^2 \sqrt{x^2 - 2}}$$

$$39. - \int \frac{(x+1) \, dx}{\sqrt{4 - x^2}}$$

$$40. - \int \frac{\sec^2(x)}{\left(4 - \tan^2(x)\right)^{3/2}} \, dx$$

$$41. - \int \frac{(x-1) \, dx}{\sqrt{x^2 - 4x + 3}}$$

$$42. - \int \frac{dx}{x^2 \sqrt{9 - x^2}}$$

$$43. - \int_{\sqrt{3}}^{2} \frac{\sqrt{x^2 - 3}}{x} \, dx$$

$$44. - \int_{1/2}^{1} \frac{dx}{x^2 \sqrt{x^2 + 4}}$$

$$45. - \int \frac{x^2 \, dx}{(x^2 - 1)^{3/2}}$$

$$46. - \int_{0}^{1} \frac{dx}{(4 + 9x^2)^2}$$