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

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

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

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

5.
$$\int \frac{x}{(x-3)\sqrt{x+1}} dx$$

$$6. \int \frac{1}{(x^2+1)\sqrt{x}} \, dx$$

7.
$$\int \frac{x}{(x^2 + 2x + 2)(\sqrt{x+1})} \, dx$$

8.
$$\int \frac{1}{(x-1)\sqrt{(x^2+1)}} \, dx$$

9.
$$\int \frac{1}{(x+1)\sqrt{x^2+x+1}} dx$$

10.
$$\int \frac{1}{(x^2-1)\sqrt{x^2+1}} dx$$

11.
$$\int \frac{x}{(x^2+4)\sqrt{x^2+1}} \, dx$$

12.
$$\int \frac{1}{(1+x^2)\sqrt{1-x^2}} dx$$

13.
$$\int \frac{1}{(2x^2+3)\sqrt{x^2-4}} \, dx$$

14.
$$\int \frac{x}{(x^2+4)\sqrt{x^2+9}}$$

15. Write a value of
$$\int \frac{1 + \cot x}{x + \log \sin x} dx$$