

1.

$$\frac{1}{\sqrt{2\pi}}e^{-\frac{x^2}{2}}$$

2.

$$e^{-x}e^{-e^{-x}}$$

3.

$$\frac{1}{2\pi}\sqrt{4-x^2}, \quad |x| \leq 2$$

4.

$$\frac{1}{2\pi}\sqrt{\frac{4-x}{x}}, \quad 0 < x \leq 4$$