

$$2008\text{-AI: } h(x) = \frac{4}{\sqrt{x \cdot (x-1) \cdot \ln\left(\frac{x}{x-1}\right)}}$$

$$2008\text{-AII: } g(x) = x \cdot \sqrt{e^2 - e^x}$$

$$2009\text{-AI: } f(x) = \frac{|x-1|}{\sqrt{x^2 - 2x + 2}}$$

$$2009\text{-AII: } f_a(x) = 2e^{-x} \cdot \sqrt{e^x - a}; \quad V = \frac{4}{3}\pi \cdot (R^2 - r^2)^{1,5}$$

$$2010\text{-AII: } s(x) = 5\sqrt{\ln x} \cdot (x + 1)^{-1}$$

$$2011\text{-AI: } k(x) = \frac{e^x}{\sqrt{e^x - 2}}$$

$$2012\text{-AI: } g(x) = \frac{\sqrt{e^x - 1}}{e^x}; \quad h(x) = x \cdot \sqrt{\sin(x)}$$

$$2012\text{-AII: } y = \pm \frac{\sqrt{98+x}}{7-x}; \quad y = \pm \frac{2}{3} \cdot \sqrt{4-x^2}$$

$$2014\text{-AI: } g(x) = 4 \cdot \sqrt{x} \cdot e^{-\frac{1}{2}x}$$

$$2015\text{-AI: } g(x) = \frac{\ln x}{2\sqrt{x}}$$

$$2016\text{-AI: } h(x) = 3 \cdot \sqrt{e^{-x} \cdot \sin(x)}$$

$$2017\text{-AI: } f(x) = \frac{3x - \sqrt{10-x^2}}{x}$$

$$2017\text{-AII: } h(x) = \frac{4\sqrt{x}}{x^2+3}$$

$$2018\text{-AI: } k(x) = 4\sqrt{x} e^{-0,5x}$$

$$2018\text{-AII: } g(x) = \frac{\sqrt{2x-1}}{x}$$