$$\phi(x)=\frac{f(x)}{f'(x)}$$

$$\phi'(x)=\frac{f'(x)\cdot f'(x)-f(x)\,f''(x)}{[f'(x)]^2}=$$

$$=1-\frac{f(x)\,f''(x)}{[f'(x)]^2}$$

$$f(x)=e^{x^2}-1$$

$$f'(x)=2x\,e^{x^2}$$

$$f''(x)=2\left[e^{x^2}+x\cdot 2xe^{x^2}\right]=2e^{x^2}\left(1+2x^2\right)$$

$$\phi'(x)=1-\frac{\left(e^{x^2}-1\right)\cdot 2e^{x^2}\left(1+2x^2\right)}{4x^2\,e^{2x^2}}=$$

$$=1-\frac{1}{2}\cdot\frac{\left(e^{x^2}-1\right)\left(1+2x^2\right)}{x^2\,e^{x^2}}$$

$$=\frac{\cancel{2x^2e^{x^2}}-e^{x^2}+1-\cancel{2x^2e^{x^2}}+2x^2}{2x^2e^{x^2}}=\frac{1+2x^2-e^{x^2}}{2x^2\,e^{x^2}}$$

$$\frac{\phi(x)}{\phi'(x)}=\frac{e^{x^2}-1}{\cancel{2x}\cancel{e^{x^2}}}\cdot\frac{\cancel{2x^2}\cancel{e^{x^2}}}{1+2x^2-e^{x^2}}=\frac{x\left(e^{x^2}-1\right)}{1+2x^2-e^{x^2}}$$