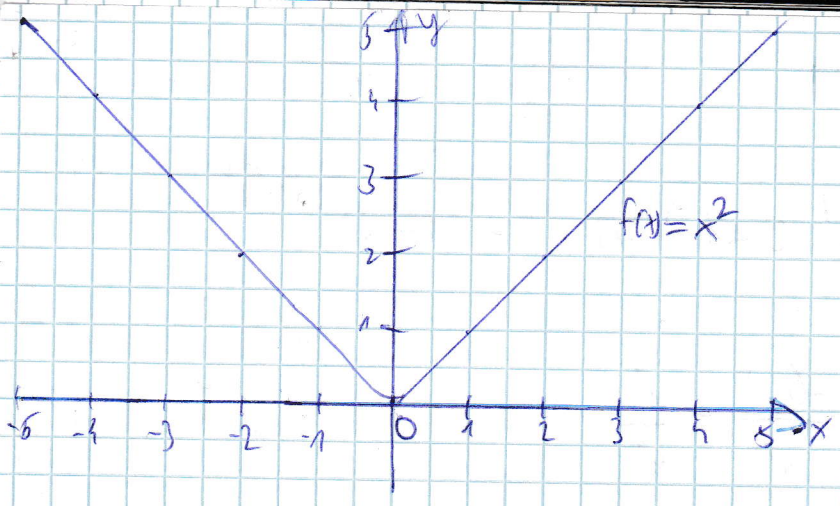
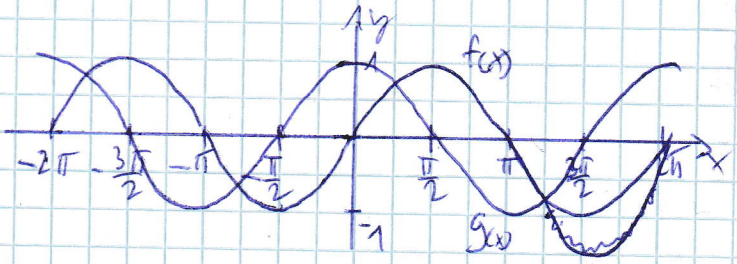
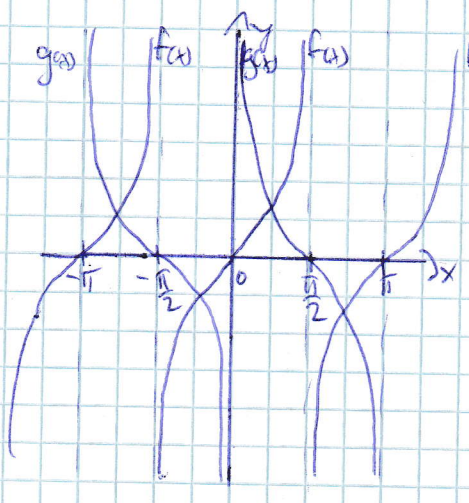
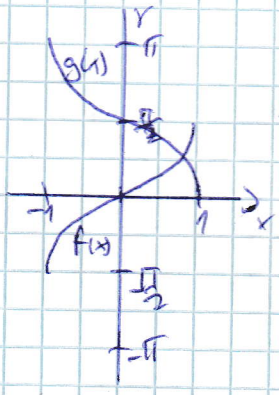




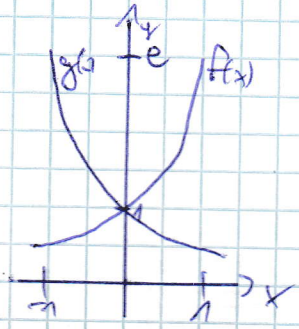
$f(x) = \sin x$
$g(x) = \cos x$



$f(x) = \operatorname{tg} x$
$g(x) = \operatorname{ctg} x$



$f(x) = \arcsin x$
$g(x) = \arccos x$



$f(x) = e^x$
$g(x) = e^{-x}$

1, $f'(x) = 28x^6 - x^{-\frac{1}{2}} = 28x^6 - \frac{1}{\sqrt{x}}$

2, $f'(x) = 1 + \frac{1}{x^2}$

3, $f'(x) = \frac{60}{x^6} - \left(-\frac{3}{2}\right)x^{5/2} = \frac{60}{x^6} + \frac{3}{2\sqrt{x^5}}$

4, $f'(x) = x^{-0,9} - 1$

5 $f'(x) = 3 \cdot \left(x^{3/2}\right)^{1/3} + e^2 = 3\sqrt{x} + e^2 = \frac{3}{2\sqrt{x}}$

6, $f'(x) = 2x \cdot \sin x + x^2 \cdot \cos x$

7, $f'(x) = 10x^4 \cdot \ln x + 2x^5 \cdot \frac{1}{x}$

8, $f'(x) = 3e^x \cos x = 3e^x \cdot \cos x - 3e^x \cdot \sin x$