习题 2.3

1. 填空题

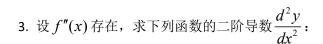
(2)
$$y = e^{1-2x}$$
, $y^{(10)}(0) =$

(3)
$$y = (2x+1)^8$$
, $y^{(8)} = ______$, $y^{(9)} = ______$.

2. 计算下列各题.

(2)
$$y = x \ln x, \, \bar{x} \, v^{(n)}$$
.

(3)
$$y = \frac{1}{x^2 + 2x - 8}$$
, $\Re y^{(n)}$.



$$(1) \quad y = \sin(f(2x))$$

$$(2) \quad y = f(\tan(2x))$$



4. 函数 $f(x) = \begin{cases} ax^2 + bx, & x < 0 \\ e^x - 1, & x \ge 0 \end{cases}$, 在 x = 0 处有二阶导数,求 a, b 的值.







