Derivacije i primjene, 2. dio - Rješenja

1. tangenta ... $y = 1$, normala ... $x = 0$
2. tangenta ... $y = \dfrac{\pi}{4}$, normala ... $x = 0$
3. $y = \dfrac{1}{4}\,x$
4. $y = -5x + 2$
5. tangenta1 ... $y = 4x$, normala1 ... $y = -\frac{1}{4}\,x$
   tangenta2 ... $y = -4x - 8$, normala2 ... $y = \frac{1}{4}\,x + \frac{1}{2}$
6. tangenta ... $y = 2$, normala ... $x = \ln\left(\dfrac{\sqrt{2}}{2} + 1\right)$
7. $y = x + 1 - \dfrac{3\pi}{4}$
8. $\dfrac{\pi}{4}$
9. (a) 5; (b) 1; (c) $\ln a$; (d) $\dfrac{1}{3}$; (e) $\dfrac{6\sqrt{2}}{1 - 2\sqrt{2}}$; (f) -1;
   (g) 0; (h) 1; (i) 0; (j) 0; (k) $\dfrac{1}{2}$; (l) $-\dfrac{1}{2}$.
10. (a) 1; (b) 1; (c) 1; (d) 0; (e) $e^{-\frac{2}{\pi}}$;
    (f) 1; (g) $e^{\frac{2}{\pi}}$; (h) 1; (i) $\dfrac{1}{\sqrt[6]{e}}$.