

Differentieer Antwoorden**oefening 1**

1. $f'(x) = \frac{1}{2}(16 - x^2)^{-\frac{1}{2}} \cdot -2x$

2. $f'(x) = 1 \cdot (x^2 + 2)^{-1} + x \cdot -1 \cdot (x^2 + 2)^{-2} \cdot 2x$

3. $f'(x) = \frac{1}{2} \cdot \left(-\frac{1}{2}\right) \cdot x^{-\frac{1}{2}}$

4. $f'(x) = \frac{1}{\cos^2(\pi - x)} \cdot -1$

5. $f'(x) = 1 \frac{2}{3} x^{\frac{2}{3}}$

6. $f'(x) = \cos(-x) \cdot -1 + -\sin(-x) \cdot -1 = -\cos(-x) + \sin(-x)$

7. $f'(x) = 4x^3 - 15x^2 + 1$

8. $g'(x) = 6x^5 + 16x^3 + 8x$

9. $h'(x) = 10x \cdot \sqrt{x}$

10. $k'(x) = -\frac{1}{x^2} + \frac{2}{x^3}$

11. $f'(x) = 6x^2 - 16x$

12. $g'(x) = 5x^4 + 4x^3 - 10x - 5$

13. 0 $f'(x) = 1 - \frac{10}{x^3}$

14. $k'(x) = \frac{4}{3} x^{\frac{1}{3}}$

15. $f'(x) = 12x^3 - 14x + 1$

16. $g'(x) = 5x^4 + 4x^3 - 10x - 5$

17. $f'(x) = x - 1\frac{1}{2} - 7x^{-3}$

18. $k'(x) = \frac{4}{5} x^{-\frac{1}{5}}$

19. $f'(x) = 5x^4 + 4x^3 + 3x^2 + 2x + 1$

20. $f'(x) = 3 \cdot (x+1)^2$