

## Funcities

6.  $3^4 - 16 + b = 0 \rightarrow b = 16 - 81 = -65$   
De grafiek is dus 65 omlaag verschoven.

7.  $f'(x) = 4x^3$ ,  $f'(2) = 32$   
dus  $m = 32x + b$  door  $(-2, 0)$   
 $32 \cdot -2 + b = 0 \rightarrow b = 64$   
 $m = 32x + 64$

8.  $g(x) = x^7 - 16x^3$   
 $g'(x) = 7x^6 - 48x^2$   
 $g'(x) = 0 \rightarrow x^2(7^4 - 48) = 0$

$$x = 0 \quad \text{of} \quad x = -\left(\frac{48}{7}\right)^{\frac{1}{4}} \quad \text{of} \quad x = \left(\frac{48}{7}\right)^{\frac{1}{4}}$$

De x-coördinaten van de toppen zijn dus:

$$-\left(\frac{48}{7}\right)^{\frac{1}{4}} \quad \text{en} \quad \left(\frac{48}{7}\right)^{\frac{1}{4}}$$