

Differentiate each equation with respect to t .

1. $P = 4x$	2. $A = bh$	3. $A = \frac{1}{2}bh$
4. $C = 2\pi r$	5. $A = \pi r^2$	6. $V = x^3$
7. $x^2 + y^2 = z^2$	8. $V = x^2h$	
9. $V = \frac{1}{3}\pi r^2h$	10. $f(x) = -5x^2 + 30x + 50$	
11. $V = \frac{4}{3}\pi r^3$	12. $f(p) = t$	13. $x(t) = -5t^2 + 30t + 50$
14. $V = lwh$		
15. $\cos \theta = \frac{a}{h}$		
16. $\frac{dW}{dt} = \frac{1}{4}(100 - W)$ Find the second derivative, $\frac{d^2W}{dt^2}$, and write it in terms of W .		