

## Dimensions

In the expressions below the letters  $a, b, c$  and  $d$  represent lengths.  
Numbers have no dimensions.

Label each expression with a **V** for volume, **A** for Area, **L** for length or **N** for neither.

$\frac{abc}{d}$	
$4\pi a^3$	
$4a^2$	
$\pi a^3 + bd$	
$(a+b)cd$	
$\pi(c^2 + d^2)$	
$4ad^2$	
$\pi bc$	
$\frac{\pi ab^3}{3d}$	

$3a^3$	
$ac + bd$	
$\pi(a+b)$	
$3(c+d)^2$	
$3\pi bc^2$	
$\frac{\pi a^3}{c}$	
$\frac{d^3}{\pi}$	
$\pi a + b$	
$\pi c^2 + cd$	

$\pi(a+d)$	
$\frac{\pi^3}{b^2}$	
$\frac{\pi abc}{2d}$	
$\pi a$	
$2a^2 + b^2$	
$\pi a^2 + b$	
$\pi a(b+c)$	
$2(c^3 + d^3)$	
$2ad^3$	

## Dimensions - Answers

In the expressions below the letters  $a, b, c$  and  $d$  represent lengths.  
Numbers have no dimensions.

Label each expression with a **V** for volume, **A** for Area, **L** for length or **N** for neither.

$\frac{abc}{d}$	A
$4\pi a^3$	V
$4a^2$	A
$\pi a^3 + bd$	N
$(a+b)cd$	V
$\pi(c^2 + d^2)$	A
$4ad^2$	V
$\pi bc$	A
$\frac{\pi ab^3}{3d}$	V

$3a^3$	V
$ac + bd$	A
$\pi(a+b)$	L
$3(c+d)^2$	A
$3\pi bc^2$	V
$\frac{\pi a^3}{c}$	A
$\frac{d^3}{\pi}$	V
$\pi a + b$	L
$\pi c^2 + cd$	A

$\pi(a+d)$	L
$\frac{\pi^3}{b^2}$	N
$\frac{\pi abc}{2d}$	A
$\pi a$	L
$2a^2 + b^2$	A
$\pi a^2 + b$	N
$\pi a(b+c)$	A
$2(c^3 + d^3)$	V
$2ad^3$	N