

## Risp 29: Odd One Out

For each triplet, try to think of ways in which each member could be the odd one out.

For example, given the triplet 2, 3, 9:

2 could be the odd one out because it is even and the others are odd.

3 could be the odd one out because it is the only triangle number.

9 could be the odd one out because it is composite and the other are prime.

Triplet 1:  $\sin x, \cos x, \tan x$

Triplet 2:  $e^x, \ln x, x^2$

Triplet 3:  $\sqrt{2}i, i + j, (1 - \sqrt{2})i + j$

Triplet 4:  $\cos 2x, \sin 2x, \cos x + \sin x$

Triplet 5:  $x, x^2, x^3$

Triplet 6:  $(\cos t, 1 + \sin t), (t, t^2 + 3), (t, 3t)$

Triplet 7:  $\sqrt{2}(1 - 2x)^2, (1 + 2x)^{-1}, (2 - x)^{1/2}$

Triplet 8:  $\sec(2x), -1, \tan(2x)$

Triplet 9:  $i, i.j, i.j.k$

Triplet 10:  $\underline{r} = \underline{i} + a\underline{j}, r = b(\underline{i} - \underline{j}), \underline{r} = k + c(\underline{j} - \underline{i})$

[www.risps.co.uk](http://www.risps.co.uk)