

Sheet1

SAMPLE Template for AS-EASY-AS

3-Dimensional Vector Operations

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Basic 3-Dimensional Vector Operations Worksheet. The Calculated cells have been Protected (locked). You may Unlock them (Sheet, General, Option, Protection) You may want to change the model to suit your purposes.

Magnitude = 150.0000
Angle [xy] (deg/rad) = 90.0000
Angle [z] (deg/rad) = 90.0000

Vector = i
0.0000

VECTOR ADDITION

Vector A = i 200.0000
Vector B = 90.0000
Sum (A+B) = 290.0000
Magnitude = 314.4837

DOT PRODUCT

Vector A = i 200.0000
Vector B = 90.0000
Dot Product (A*B) = 19400.0000

VECTOR ANGLE AND MAGNITUDE CALCULATIONS

Vector = i 20.0000
Magnitude = 44.7214
Angle [xy] (deg/rad) = 63.4349
Angle [z] (deg/rad) = 90.0000

ANGLE BETWEEN A AND B

Vector A = i 200.0000
Vector B = 90.0000
Angle (rad/deg) = 0.8865

CROSS PRODUCT

Sheet1

		i
Vector A =	200.0000	
Vector B =	90.0000	
Cross Prod (AxB) =	0.0000	
Magnitude =	23100.0000	

1.5708	
1.5708	
j	k
150.0000	0.0000

j	k
0.0000	20.0000
120.0000	0.0000
120.0000	20.0000

j	k
10.0000	10.0000
120.0000	20.0000

j	k
40.0000	0.0000

1.1071
1.5708

j	k
10.0000	30.0000
120.0000	0.0000
50.7913	

j	k
10.0000	0.0000
120.0000	0.0000
0.0000	23100.0000