Non-perpendicular vector resolution

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vector** | **X comp**  **Cos Θ)(V)** | **Y comp** | **resultant** | **Angle** | **Θ in triangle** |
| 75 m @ 120 | -37.5 m | 65 m |  |  |  |
| 100 M @ 150 | -86.6 m | 50 m |  |  |  |
|  | -124 X | 115 m Y | 169 m | 137 | 43 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vector** | **X comp**  **Cos Θ)(V)** | **Y comp** | **resultant** | **Angle** | **Θ in triangle** |
| 200 mi/h@30 | 173 mi/h | 100 Y |  |  |  |
| 75 mi/h @ 110 | -25.6 mi/h | 70.5 Y |  |  |  |
|  | 147.4mi/hX | 170.5 Y | 225 mi/h | 49° | 49° |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vector** | **X comp**  **Cos Θ)(V)** | **Y comp** | **resultant** | **Angle** | **Θ in triangle** |
| 350 @ 220 | -268 | -225 |  |  |  |
| 500 @ 110 | -171 | 470 |  |  |  |
|  | -439 km/h X | 245 km/h Y | 503 km/h | 151 | 29 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vector** | **X comp**  **Cos Θ)(V)** | **Y comp** | **resultant** | **Angle** | **Θ in triangle** |
| 2800 @ -40° | 2145 x | -1800 Y |  |  |  |
| 4500 @ 60° | 2250 x | 3897 Y |  |  |  |
|  | 4395 m X | 2097 Y | 4870 m | 25.5 | 25.5 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vector** | **X comp**  **Cos Θ)(V)** | **Y comp** | **resultant** | **Angle** | **Θ in triangle** |
| 150 m/s @ - 75 | 38.8 m/s | - 145 m/s |  |  |  |
| 250 m/s @ 135 | - 177 m/s | 177 m/s |  |  |  |
|  | - 138 m/s X | 32 m/s Y | 141 m/s | 167° | 13° |