$\bar{a} = (1,1,0)$ $\bar{b} = (1,0,-1)$ $\bar{c} = (0,1,1)$

1st triple product: $b \times c = (0)(1) - (-1)(1) = 1$

$= (-1)(0) - (1)(1) = -1$

$= (1)(1) - (0)(0) = 1$

$b \times c = (1,-1,1)$

$a \times (b \times c) = (1)(0) - (0)(1) = 0$

$(0)(1) - (1)(0) = 1$

$(1)(1) - (1)(1) = 0$

$a \times (b \times c) = (0,1,0)$

2nd triple product

$a \times b = (1)(-1) - (0)(0) = -1$

$= (0)(1) - (1)(-1) = 1$

$= (1)(0) - (1)(1) = -1$

$a \times b = -1,1,-1$

1	0
1	0	-1

$(a \times b) \times c = (1)(-1) - (1)(1) = -2$

$= (1)(2) - (0)(-1) = 2$

$= (0)(1) - (1)(2) = -2$

$(a \times b) \times c = (-2,2,-2)$