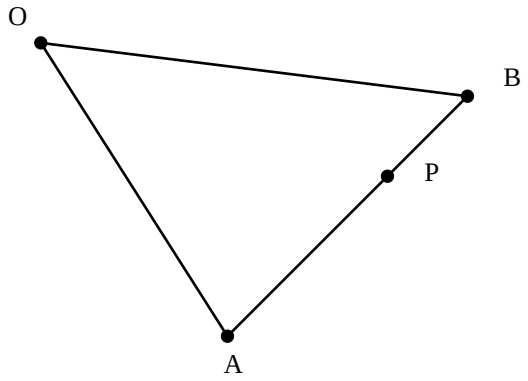
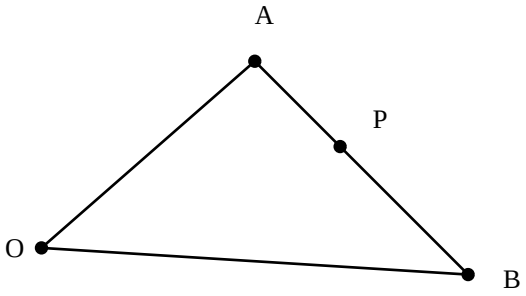
Solutions – Vector Ratios (A)



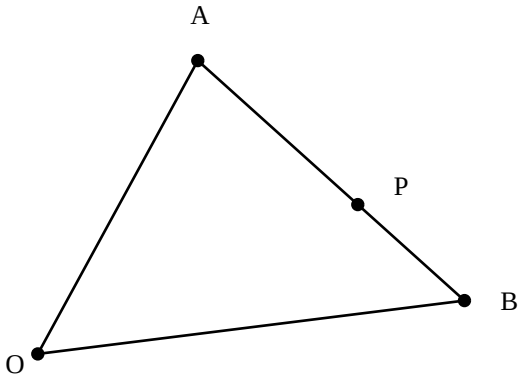
Let OA = p and OB = q.
AP : PB = 2 : 1.
Find PB in terms of p and q.

$(-p + q)/3$



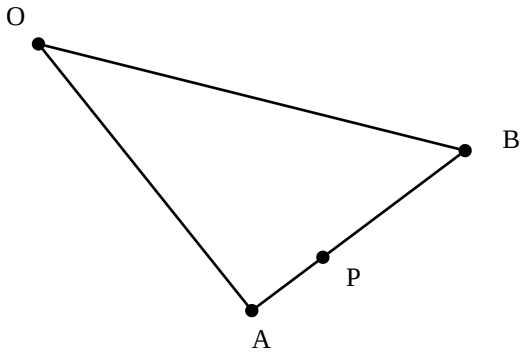
Let OA = p and OB = q.
AP : PB = 2 : 3.
Find OP in terms of p and q.

$(3p + 2q)/5$



Let OA = u and OB = v.
AP : PB = 3 : 2.
Find AP in terms of u and v.

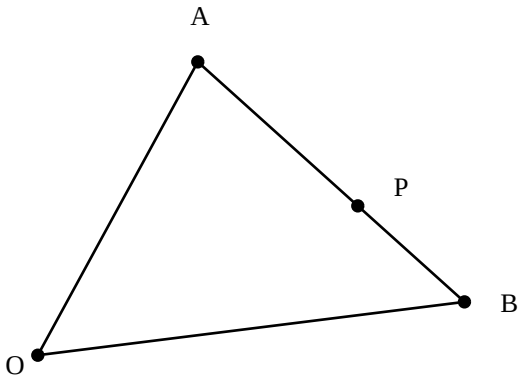
$(-3u + 3v)/5$



Let OA = a and OB = b.
AP : PB = 1 : 2.
Find AP in terms of a and b.

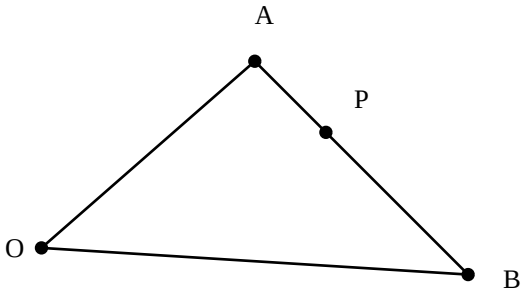
$(-a + b)/3$

Solutions – Vector Ratios (B)



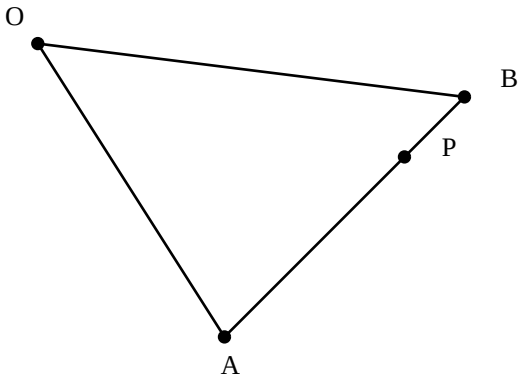
Let OA = u and OB = v.
AP : PB = 3 : 2.
Find AP in terms of u and v.

$(-3u + 3v)/5$



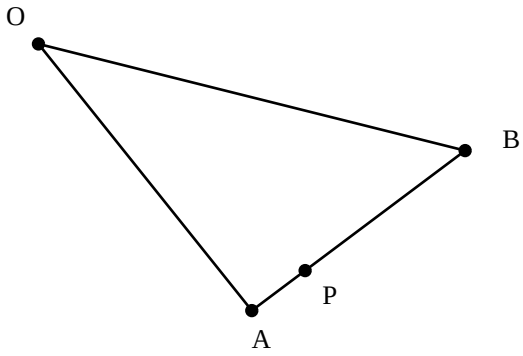
Let OA = u and OB = v.
AP : PB = 1 : 2.
Find PB in terms of u and v.

$(-2u + 2v)/3$



Let OA = p and OB = q.
AP : PB = 3 : 1.
Find OP in terms of p and q.

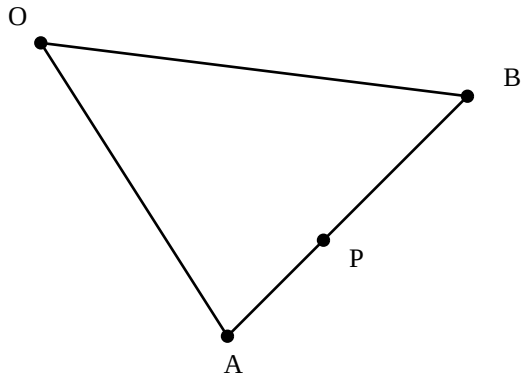
$(p + 3q)/4$



Let OA = a and OB = b.
AP : PB = 1 : 3.
Find AP in terms of a and b.

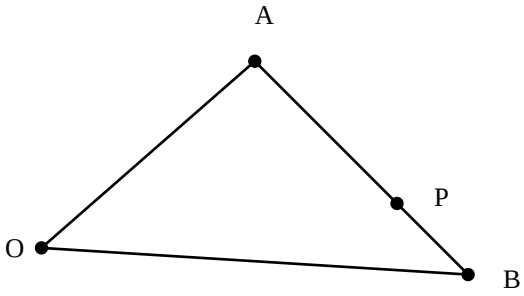
$(-a + b)/4$

Solutions – Vector Ratios (C)



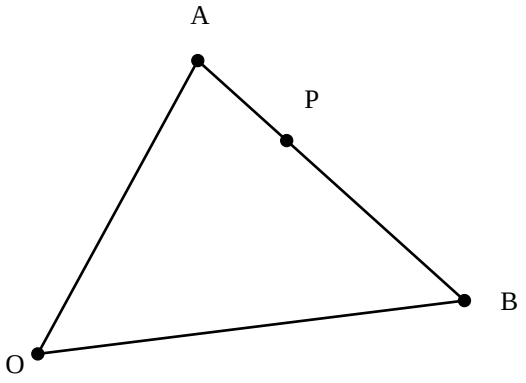
Let OA = p and OB = q.
AP : PB = 2 : 3.
Find OP in terms of p and q.

$(3p + 2q)/5$



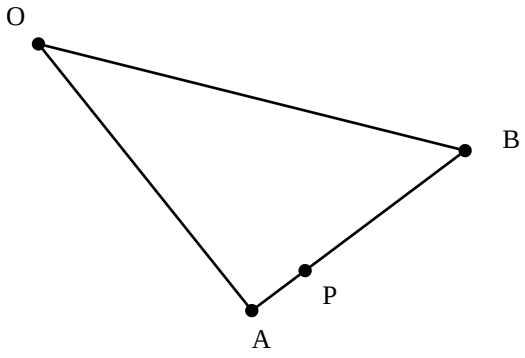
Let OA = u and OB = v.
AP : PB = 2 : 1.
Find PB in terms of u and v.

$(–u + v)/3$



Let OA = u and OB = v.
AP : PB = 1 : 2.
Find AP in terms of u and v.

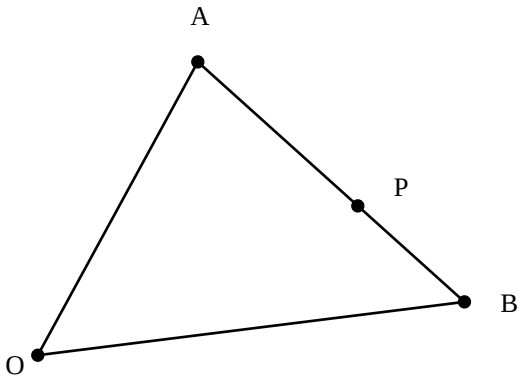
$(–u + v)/3$



Let OA = a and OB = b.
AP : PB = 1 : 3.
Find PB in terms of a and b.

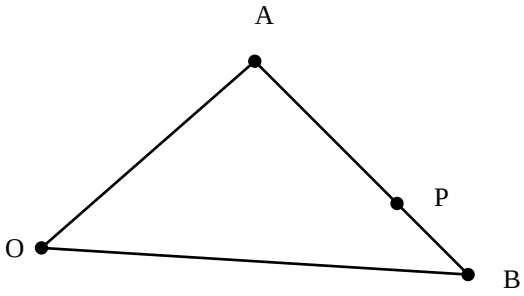
$(–3a + 3b)/4$

Solutions – Vector Ratios (D)



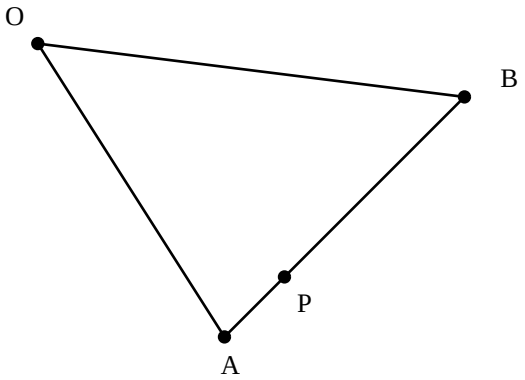
Let OA = u and OB = v.
AP : PB = 3 : 2.
Find AP in terms of u and v.

$(-3u + 3v)/5$



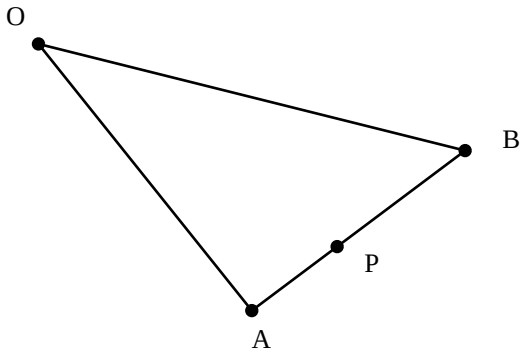
Let OA = a and OB = b.
AP : PB = 2 : 1.
Find PB in terms of a and b.

$(-a + b)/3$



Let OA = p and OB = q.
AP : PB = 1 : 3.
Find PB in terms of p and q.

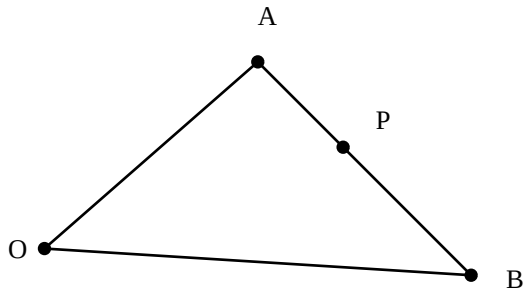
$(-3p + 3q)/4$



Let OA = p and OB = q.
AP : PB = 2 : 3.
Find OP in terms of p and q.

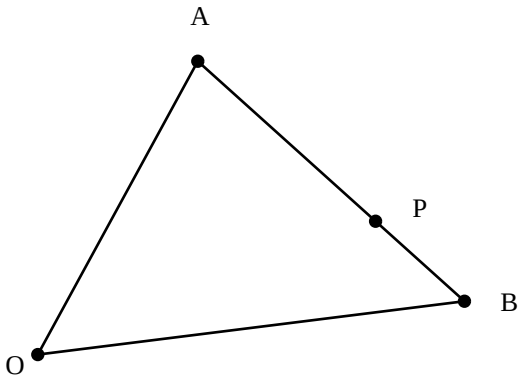
$(3p + 2q)/5$

Solutions – Vector Ratios (E)



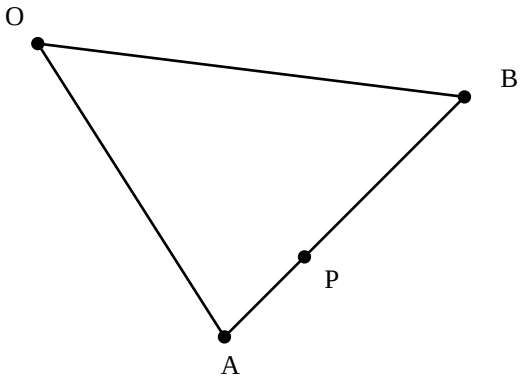
Let OA = a and OB = b.
AP : PB = 2 : 3.
Find OP in terms of a and b.

$(3a + 2b)/5$



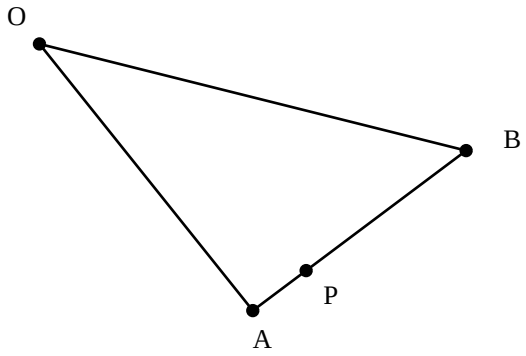
Let OA = u and OB = v.
AP : PB = 2 : 1.
Find OP in terms of u and v.

$(u + 2v)/3$



Let OA = p and OB = q.
AP : PB = 1 : 2.
Find PB in terms of p and q.

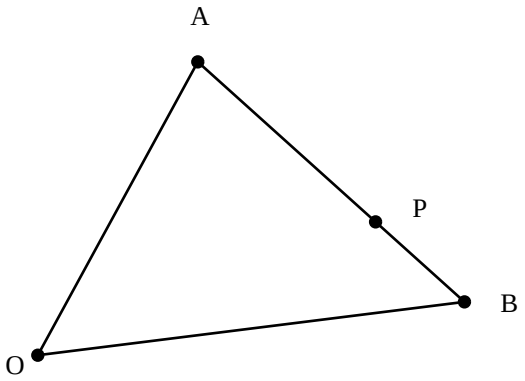
$(–2p + 2q)/3$



Let OA = p and OB = q.
AP : PB = 1 : 3.
Find AP in terms of p and q.

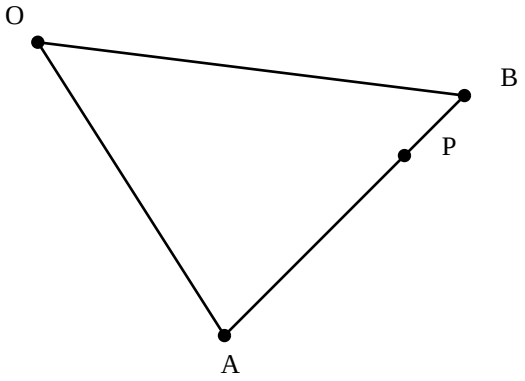
$(–p + q)/4$

Solutions – Vector Ratios (F)



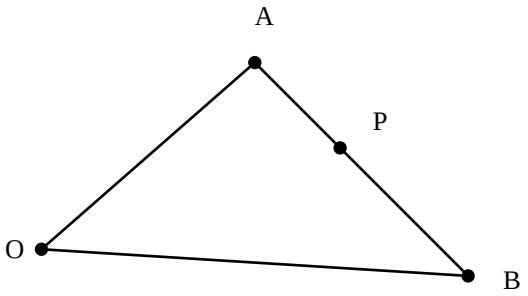
Let OA = u and OB = v.
AP : PB = 2 : 1.
Find AP in terms of u and v.

$(-2u + 2v)/3$



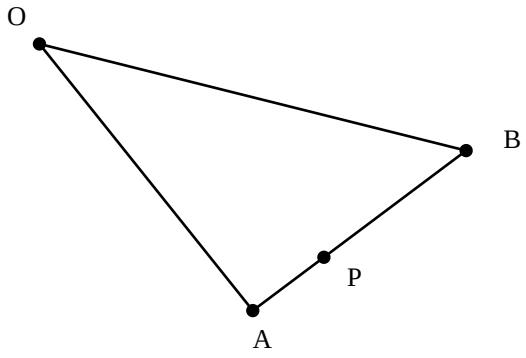
Let OA = p and OB = q.
AP : PB = 3 : 1.
Find PB in terms of p and q.

$(-p + q)/4$



Let OA = a and OB = b.
AP : PB = 2 : 3.
Find OP in terms of a and b.

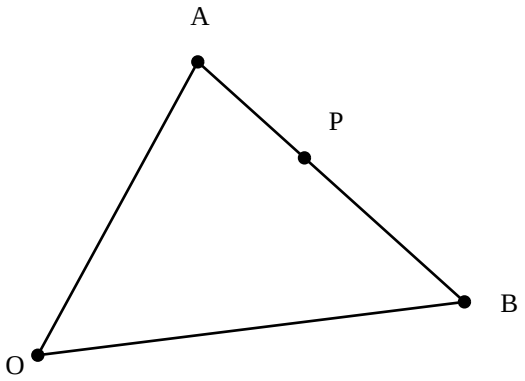
$(3a + 2b)/5$



Let OA = a and OB = b.
AP : PB = 1 : 2.
Find AP in terms of a and b.

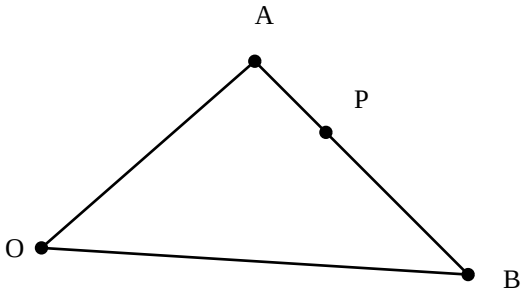
$(-a + b)/3$

Solutions – Vector Ratios (G)



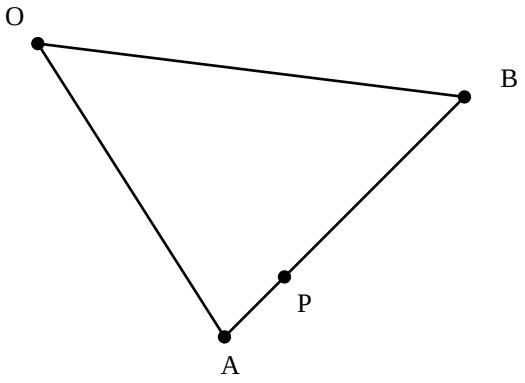
Let OA = p and OB = q.
AP : PB = 2 : 3.
Find OP in terms of p and q.

$(3p + 2q)/5$



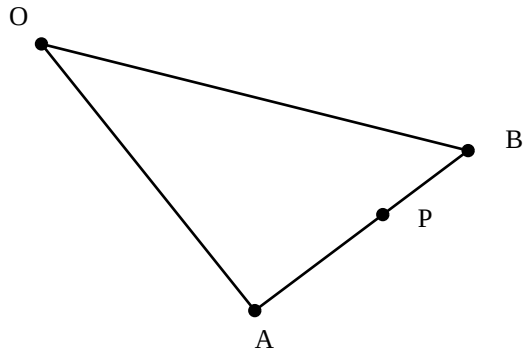
Let OA = a and OB = b.
AP : PB = 1 : 2.
Find OP in terms of a and b.

$(2a + b)/3$



Let OA = u and OB = v.
AP : PB = 1 : 3.
Find AP in terms of u and v.

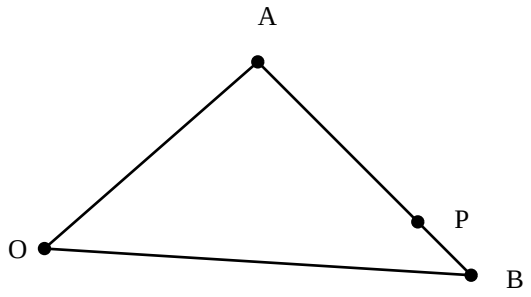
$(–u + v)/4$



Let OA = u and OB = v.
AP : PB = 3 : 2.
Find PB in terms of u and v.

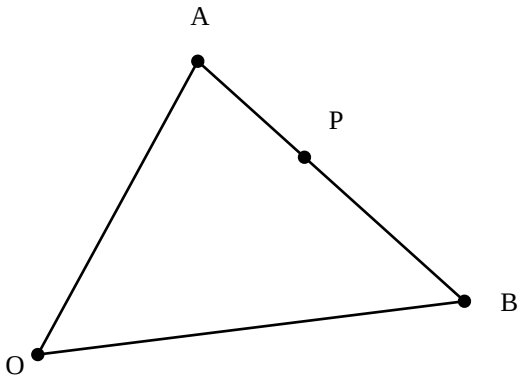
$(–2u + 2v)/5$

Solutions – Vector Ratios (H)



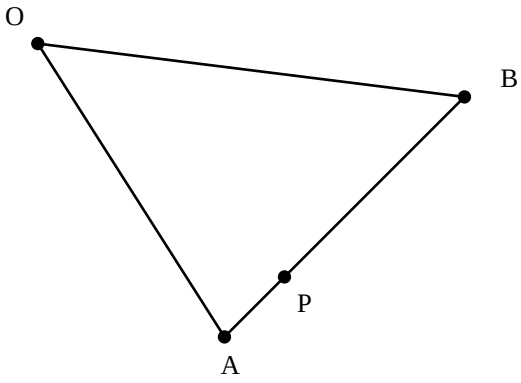
Let OA = a and OB = b.
AP : PB = 3 : 1.
Find AP in terms of a and b.

$(-3a + 3b)/4$



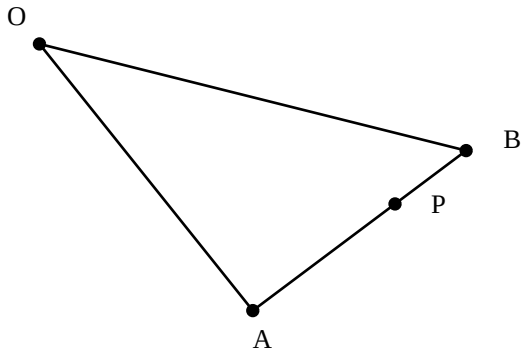
Let OA = a and OB = b.
AP : PB = 2 : 3.
Find PB in terms of a and b.

$(-3a + 3b)/5$



Let OA = u and OB = v.
AP : PB = 1 : 3.
Find OP in terms of u and v.

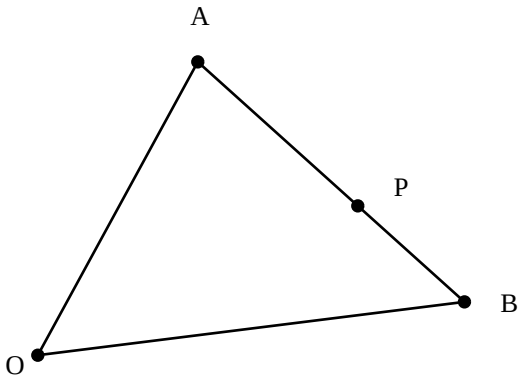
$(3u + v)/4$



Let OA = p and OB = q.
AP : PB = 2 : 1.
Find OP in terms of p and q.

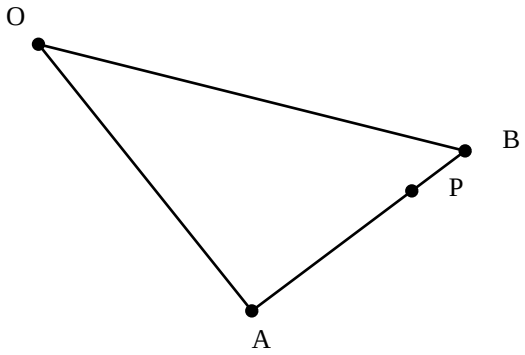
$(p + 2q)/3$

Solutions – Vector Ratios (I)



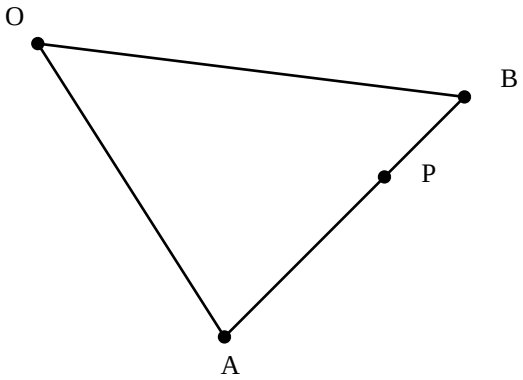
Let OA = u and OB = v.
AP : PB = 3 : 2.
Find AP in terms of u and v.

$(-3u + 3v)/5$



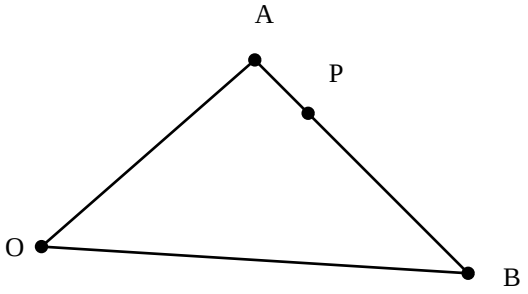
Let OA = p and OB = q.
AP : PB = 3 : 1.
Find PB in terms of p and q.

$(-p + q)/4$



Let OA = a and OB = b.
AP : PB = 2 : 1.
Find OP in terms of a and b.

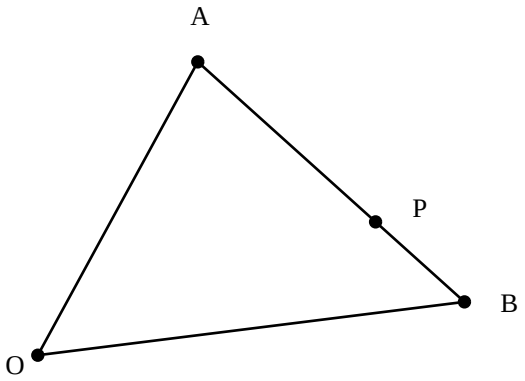
$(a + 2b)/3$



Let OA = u and OB = v.
AP : PB = 1 : 3.
Find AP in terms of u and v.

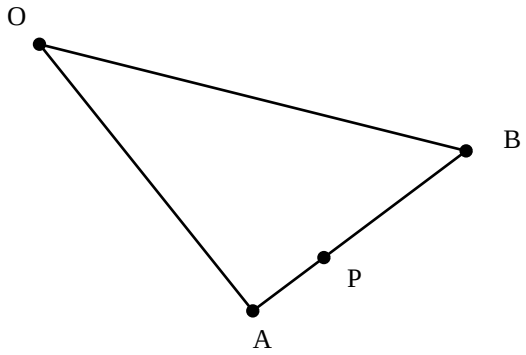
$(-u + v)/4$

Solutions – Vector Ratios (J)



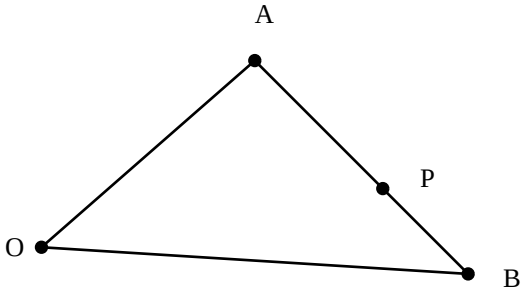
Let OA = p and OB = q.
AP : PB = 2 : 1.
Find OP in terms of p and q.

$(p + 2q)/3$



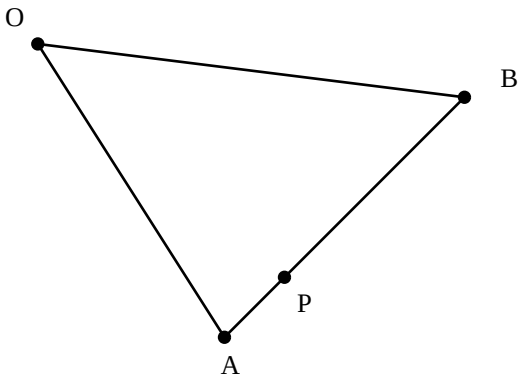
Let OA = u and OB = v.
AP : PB = 1 : 2.
Find PB in terms of u and v.

$(–2u + 2v)/3$



Let OA = a and OB = b.
AP : PB = 3 : 2.
Find PB in terms of a and b.

$(–2a + 2b)/5$



Let OA = u and OB = v.
AP : PB = 1 : 3.
Find AP in terms of u and v.

$(–u + v)/4$