**Using Vectors in Translations**

Write down the vectors which represent the following translations.

(a) 4 right then 6 up

(b) 5 right then 2 up

(c) 2 up then 5 right

(d) 1 left then 7 up

(e) 5 left then 8 down

(f) 2 left then 1 down

(g) 5 right then 5 down

(h) 6 right

(i) 9 up

(j) 3 left

Write in words the translations described by each of these vectors.

(a) (b)

(c) (d)

(e) (f)

(g) (h)

(i) (j)

(a) The point (5, 4) is translated with the vector . Write down the new coordinates of the point.

(b) The point (2, 10) is translated with the vector . Write down the new coordinates of the point.

(c) The point (-3, 6) is translated with the vector . Write down the new coordinates of the point.

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