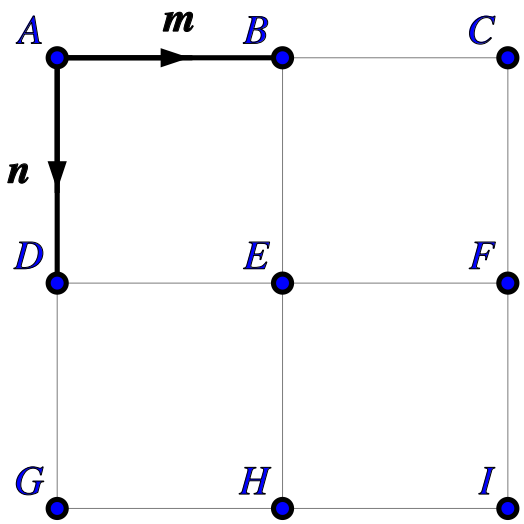
Vectors on a grid

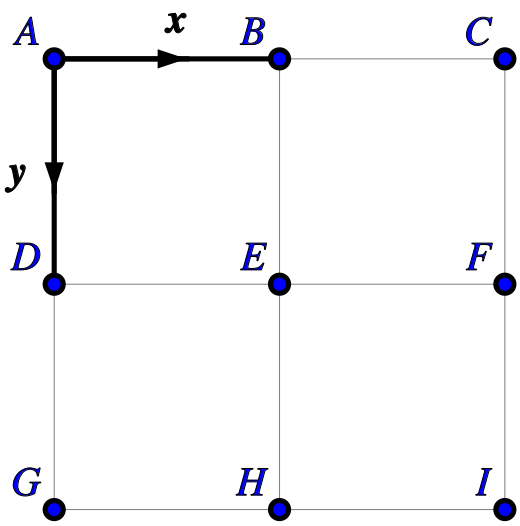
Name:	Class:	Date:

Mark	/ 6	%

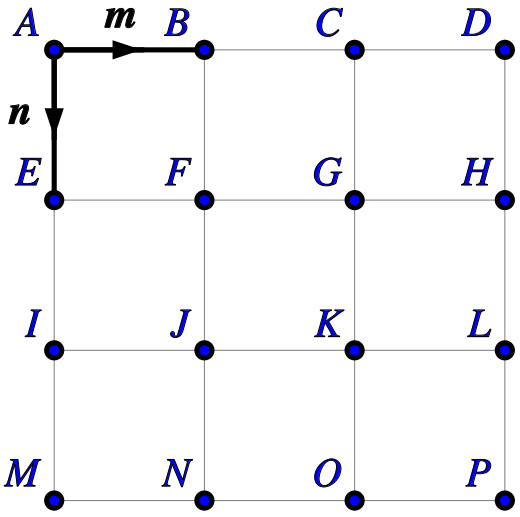
1) Using the diagram below, express the vector $\overrightarrow{BG}$ in terms of **m** and **n**. [1]



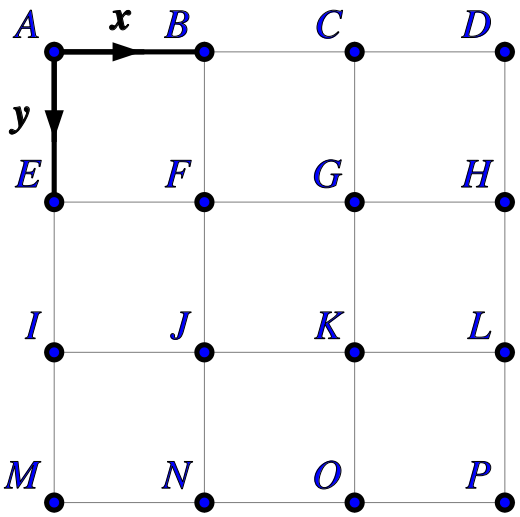
2) Find the vector formed when the vector **- y** is added to point F. [1]
Write the vector as capital letters e.g. $\overrightarrow{AB}$.



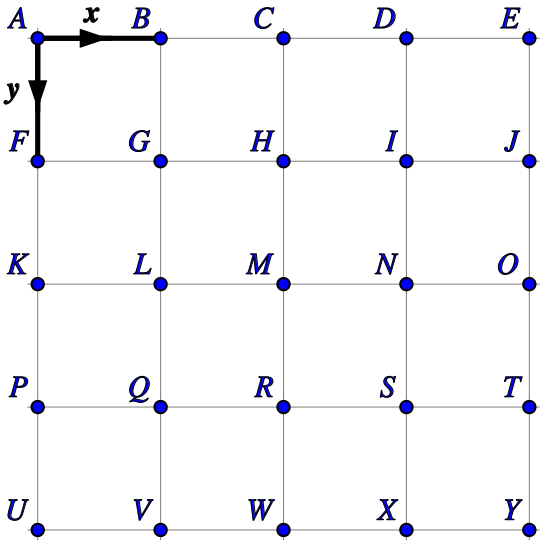
3) Using the diagram below, express the vector $\overrightarrow{GH}$ in terms of **m** and **n**. [1]



4) Find the vector formed when the vector **y-x** is added to point D. [1]
Write the vector as capital letters e.g. $\overrightarrow{AB}$.



5) In the diagram below, $\overrightarrow{AB}$ = **x** and $\overrightarrow{AF}$ = **y**.

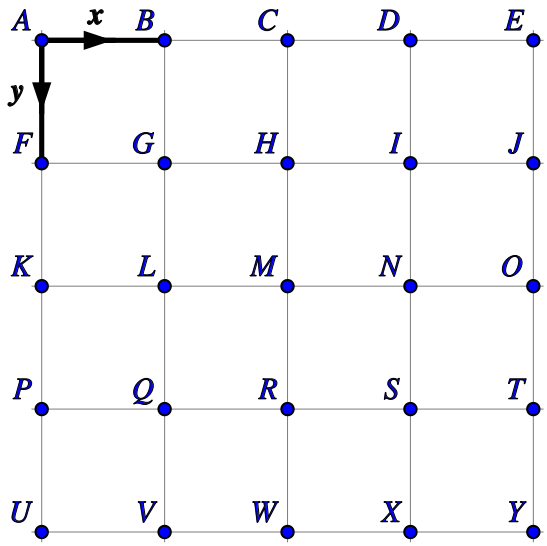


Express the following vectors in terms of **x** and **y**.

a) $\overrightarrow{VX}$ b) $\overrightarrow{UP}$ c) $\overrightarrow{LP}$ d) $\overrightarrow{IU}$

[1]

6) In the diagram below, $\overrightarrow{AB}$ = **x** and $\overrightarrow{AF}$ = **y**.



Find the vectors formed when the following are added to point U, giving your answers as capital letters e.g. $\overrightarrow{AB}$.

a) 2x b) -4y c) 3x-3y d) 4x-2y

[1]

Solutions for the assessment Vectors on a grid

1) $\overrightarrow{BG}$ = **2n-m**

2) Vector = `vec(FC)

3) $\overrightarrow{GH}$ = **m**

4) Vector = $\overrightarrow{DG}$

5) a) $\overrightarrow{VX}$ = **2x**
b) $\overrightarrow{UP}$ = **-y**
c) $\overrightarrow{LP}$ = **y-x**
d) $\overrightarrow{IU}$ = **3y-3x**

6) a) $\overrightarrow{UW}$
b) $\overrightarrow{UA}$
c) $\overrightarrow{UI}$
d) $\overrightarrow{UO}$