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| **PH 201 Pre-Lab 02** | **Vectors** | **Name** |  |

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| 1. What are the x and y components (include appropriate signs) of the vector given by 40.0 N at an angle of 335˚ from the +x axis? |
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| $$V\_{x}=$$ |  |

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|  |  |
| --- | --- |
| $$V\_{y}=$$ |  |

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|  |
| 2.Two vectors are given by $\vec{A}=2\hat{x}+4\hat{y}$and $\vec{B}=-6\hat{x}-3\hat{y}$ **.** |
| Find in component form : |
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|  |  |
| --- | --- |
| $$\vec{A}+\vec{B}=$$ |  |
|  |  |
|  |  |
|  |  |
| $$\vec{A}-\vec{B}=$$ |  |
|  |  |
|  |  |
|  |  |
| $$2\vec{A}-3\vec{B}=$$ |  |
|  |  |
|  |  |

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|  |
| 3. What is the magnitude and direction of the vector  |
| $$\vec{R}=4\hat{x}-7\hat{y}$$ |
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| --- | --- |
| **Magnitude** $(\left|\vec{R}\right|)$**=** |  |
|  |  |
| **Direction (θ) =**  |  |

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