

# University Physics 1A

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September 1st, 2017

## Problem Review

Suppose  $\vec{A} = 1.00\text{cm}$  at  $0^\circ$ ,  $\vec{B} = 2.00\text{cm}$  at  $120^\circ$  and  $\vec{C} = 3.00\text{cm}$  at  $240^\circ$ .

$$A_x = 1 \cos(0) = 1\text{cm}$$

$$A_y = 1 \sin(0) = 0\text{cm}$$

$$B_x = 2 \cos(120) = -1\text{cm}$$

$$B_y = 2 \sin(120) = 1.73\text{cm}$$

$$C_x = 3 \cos(240) = -1.5\text{cm}$$

$$C_y = 3 \sin(240) = -2.6\text{cm}$$

$$\vec{A} = 1\text{cm} \hat{i} + 0\hat{j}$$

$$\vec{B} = -1\text{cm} \hat{i} + 1.73\text{cm} \hat{j}$$

$$\vec{C} = -1.5\text{cm} \hat{i} + (-2.6\text{cm})\hat{k}$$

$$\vec{A} + \vec{B} + \vec{C} = -1.5\text{cm} \hat{i} - 0.87\text{cm} \hat{j}$$

You can find all my notes at <http://omgimanerd.tech/notes>. If you have any questions, comments, or concerns, please contact me at [alvin@omgimanerd.tech](mailto:alvin@omgimanerd.tech)