realtristan.sty

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1 Physics Kinematic Equations

Use the 'flex' command to put items beside eachother. Substitute values into the kinematic equations using the following keys: a=?, t=?, d=?, v1=?, v2=?

$$(\Delta d) = (v_1)(\Delta t) + \frac{1}{2}(a)(\Delta t)^2 \qquad (\Delta d) = (13.6)(\Delta t) + \frac{1}{2}(0.264)(\Delta t)^2$$

$$(\Delta d) = (v_2)(\Delta t) - \frac{1}{2}(a)(\Delta t)^2 \qquad (\Delta d) = (0)(\Delta t) - \frac{1}{2}(0.264)(\Delta t)^2$$

$$(\Delta d) = \left(\frac{(v_1) + (v_2)}{2}\right)(\Delta t) \qquad (\Delta d) = \left(\frac{(10.2) + (v_2)}{2}\right)(10.6)$$

$$(v_2) = (v_1) + (a)(\Delta t) \qquad (v_2) = (16.7) + (a)(10.6)$$

$$(v_2) = (v_1) + 2(a)(\Delta d) \qquad (v_2) = (v_1) + 2(a)(9.4)$$

2 Middle Align Calculations

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

$$\therefore (\Delta d) = (v_1)(\Delta t) + \frac{1}{2}(a)(\Delta t)^2$$

3 Left Align Calculations

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

$$\therefore (\Delta d) = (v_2)(\Delta t) - \frac{1}{2}(a)(\Delta t)^2 \tag{1}$$

4 Coloured Boxes

This is an example of a red box

$$CDC^{\dagger} = \Omega = \begin{pmatrix} \omega_1^2 & 0 & ... & 0 \\ 0 & \omega_2^2 & ... & 0 \\ \vdots & & \ddots & \vdots \\ 0 & 0 & ... & \omega_{Nd}^2 \end{pmatrix},$$

where C is a unitary matrix (each column is one of the eigenvectors of the dynamic matrix D), Nd is the product of the number of particlces, N, and the number of dimensions, d.

This is an example of a green box

$$CDC^{\dagger} = \Omega = \begin{pmatrix} \omega_1^2 & 0 & ... & 0 \\ 0 & \omega_2^2 & ... & 0 \\ \vdots & & \ddots & \vdots \\ 0 & 0 & ... & \omega_{Nd}^2 \end{pmatrix},$$

where C is a unitary matrix (each column is one of the eigenvectors of the dynamic matrix D), Nd is the product of the number of particlces, N, and the number of dimensions, d.

This is an example of a blue box

$$CDC^{\dagger} = \Omega = \begin{pmatrix} \omega_1^2 & 0 & \dots & 0 \\ 0 & \omega_2^2 & \dots & 0 \\ \vdots & & \ddots & \vdots \\ 0 & 0 & \dots & \omega_{Nd}^2 \end{pmatrix},$$

where C is a unitary matrix (each column is one of the eigenvectors of the dynamic matrix D), Nd is the product of the number of particlces, N, and the number of dimensions, d.