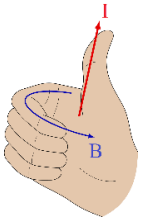
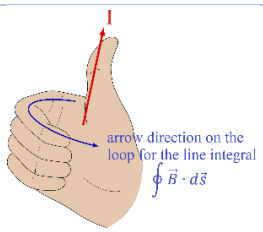
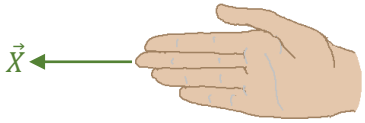
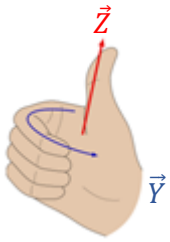
RIGHT HAND RULE

Below are various right-hand rules that are used in Physics II.

Where do we use this?	Orientation of the hand	Directions
A straight wire is carrying current in a given direction and we are looking for the direction of magnetic field coused by that current.		Thumb: Current $\vec{I}$ Fingers curl around: Magnetic field $\vec{B}$
A line integral is given around a closed loop that has arrows showing the loop's direction.		Thumb: Current $\vec{I}$ Fingers curl around: Arrow direction $\oint \vec{B} \cdot d\vec{s}$
Any cross product, for example $\vec{X} \times \vec{Y} = \vec{Z}$	 Step 1: Fingers of your right hand must be straight and pointing in the direction of the first vector in the cross product. In our example, $\vec{X}$  Step 2: Curl fingers from the direction of the first vector $\vec{X}$ towards the second vector, now your fingertips should point at $\vec{Y}$. Your thumb will show the direction of the resultant $\vec{Z}$	Fingers straight: First vector $\vec{X}$ Fingers curl towards: second vector $\vec{Y}$ Thumb: resultant vector $\vec{Z}$

For more information or to book an appointment

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