

**Vector Resolution using SOH CAH TOA and CCW Direction**

Use trigonometric functions to determine the components of the following vectors. Show your work for the first four calculations.

<p>1. <math>\mathbf{v} = 25 \text{ m/s}, 0^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math>                      Show your work here:</p>	<p>2. <math>\mathbf{v} = 25 \text{ m/s}, 90^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math>                      Show your work here:</p>
<p>3. <math>\mathbf{v} = 25 \text{ m/s}, 45^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math>                      Show your work here:</p>	<p>4. <math>\mathbf{v} = 25 \text{ m/s}, 60^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math>                      Show your work here:</p>
<p>5. <math>\mathbf{v} = 75 \text{ m/s}, 240^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>	<p>6. <math>\mathbf{v} = 2.5 \text{ m/s}, 135^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>
<p>7. <math>\mathbf{v} = 95 \text{ m/s}, 210^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>	<p>8. <math>\mathbf{v} = 75 \text{ m/s}, 320^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>
<p>9. <math>\mathbf{v} = 115 \text{ m/s}, 120^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>	<p>10. <math>\mathbf{v} = 2.5 \text{ m/s}, 225^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>
<p>11. <math>\mathbf{v} = 35 \text{ m/s}, 180^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>	<p>12. <math>\mathbf{v} = 450 \text{ m/s}, 340^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>
<p>13. <math>\mathbf{v} = 65 \text{ m/s}, 290^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>	<p>14. <math>\mathbf{v} = 90 \text{ m/s}, 170^\circ</math>  <math>v_x = \text{_____ m/s}</math>    <math>v_y = \text{_____ m/s}</math></p>