

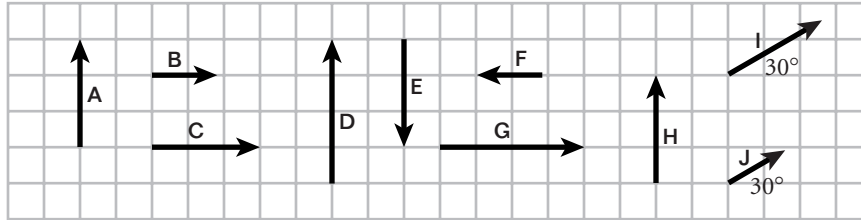
**Two-Dimensional
Motion and
Vectors**

HOLT PHYSICS

Diagram Skills

Introduction to Vectors

Use the following vectors to answer the questions.



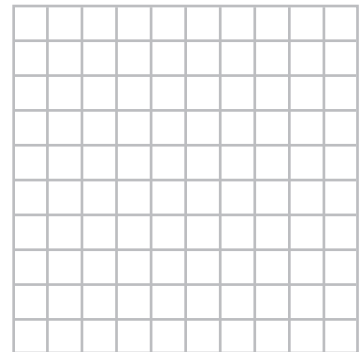
A = 3 m C = 3 m E = 3 m G = 4 m I = 3 m
 B = 2 m D = 4 m F = 2 m H = 3 m J = 2 m

- Which vectors have the same magnitude?

- Which vectors have the same direction?

- Which arrows, if any, represent the same vector?

- In the space provided, construct and label a diagram that shows the vector sum $2\mathbf{A} + \mathbf{B}$. Construct and label a second diagram that shows $\mathbf{B} + 2\mathbf{A}$.



- In the space provided, construct and label a diagram that shows the vector difference $\mathbf{A} - (\mathbf{B}/2)$. Construct and label a second diagram that shows $(\mathbf{B}/2) - \mathbf{A}$.

