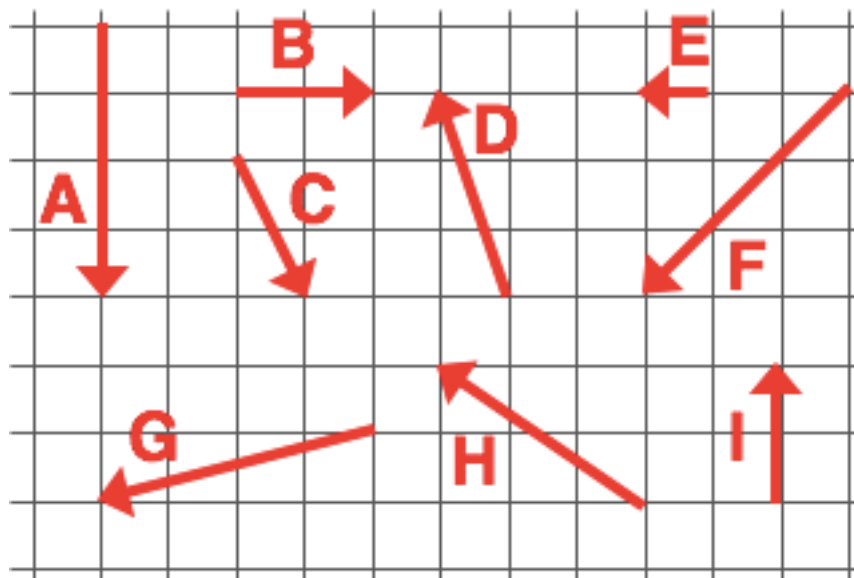# Component Addition of Vectors

The following diagram is used in all questions:

Question Groups 1-3 all use the following table:

Vector	x	y
Resultant		

Question Group 1
Question 1
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
D + G = ???

Question 2

Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
D + G = ???

Question 3
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
D + G = ???

Question Group 2
Question 4
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
H + F = ???

Question 5
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
H + F = ???

Question 6
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
H + F = ???

Question Group 3
Question 7
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
A + C = ???

Question 8
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
A + C = ???

Question 9
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
A + C = ???

Question Groups 4-6 all use the following table:

Vector	x	y
Resultant		

Question Group 4
Question 10
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
G   +   D   +   F = ???

Question 11
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
G   +   D   +   F = ???

Question 12
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
G   +   D   +   F = ???

Question Group 5
Question 13
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
H + F + I = ???

Question 14
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
H + F + I = ???

Question 15
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
H + F + I = ???

Question Group 6
Question 16
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
B + C + A = ???

Question 17
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
B + C + A = ???

Question 18
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
B + C + A = ???

Question Groups 7-9 all use the following table:

Vector	x	y
Resultant		

Question Group 7
Question 19
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
A + H + C + D = ???

Question 20
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
A + H + C + D = ???

Question 21
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
A + H + C + D = ???

Question Group 8
Question 22
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge

H + B + G + I = ???

Question 23
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
H + B + G + I = ???

Question 24
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
H + B + G + I = ???

Question Group 9
Question 25
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 5 km along its edge
F + D + C + B = ???

Question 26
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 10 km along its edge
F + D + C + B = ???

Question 27
Use the diagram and scale to determine the magnitude and direction of the resultant for the vector addition equation. Begin with the table.

Scale: 1 square = 20 km along its edge
F + D + C + B = ???

The following graphic appears on all questions: