

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

5. Measure the resultant displacement on your diagram and express it in meters.

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6. Since your vector diagram forms a right triangle, calculate the resultant algebraically.

7. Return to the map and measure the total displacement using the map scale. How do the two resultants compare?

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8. What distance did you walk?

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### C. Adding Three Vectors

9. Using the scale of 1 cm = 92 m, draw a vector diagram for the following trip. Start at Newark High School and go down Brennan to Granville Road, then along Granville Road to N 11th Street and down N 11th Street to White's Field.

10. From your diagram, determine in meters the distance traveled.

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11. Determine the total displacement using your diagram.

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12. Determine the total displacement from the original map.

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13. Explain why there might be a difference between your answers to questions 11 and 12.

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