Name: _____
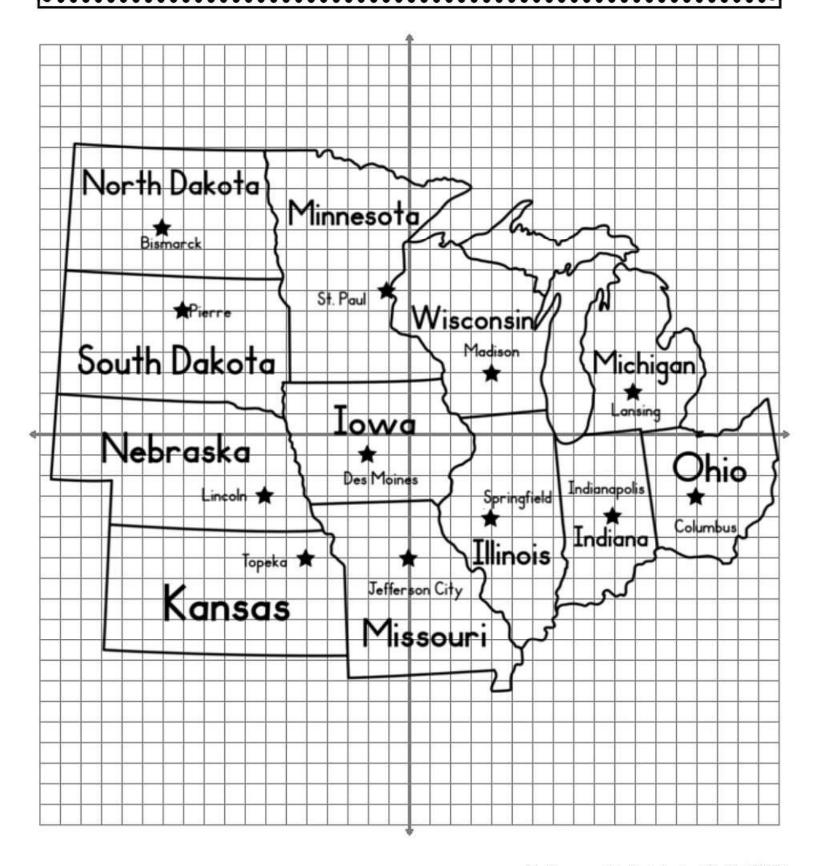
Mixed Transformations Practice with Maps

Directions: Using the "Map of Northeast US", perform the transformations described in order. Then describe an alternative path.

Direction Set A

Start in Harrisburg, Pennsylvania:

- Reflect across the x-axis.
- Then rotate 270 degrees counterclockwise about the origin
- Then translate down 2 units and left 9 units

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set B

Start in Boston, Massachusetts:

- Dilate by a factor of 2 with a center of dilation at the origin.
- Then rotate 90 degrees clockwise about the origin.
- Then translate left 3 units

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set C

Start in Hartford, Connecticut:

- Rotate 180 degrees about the origin
- Then reflect across the y-axis
- Then translate right 4 units and up 4 units

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:
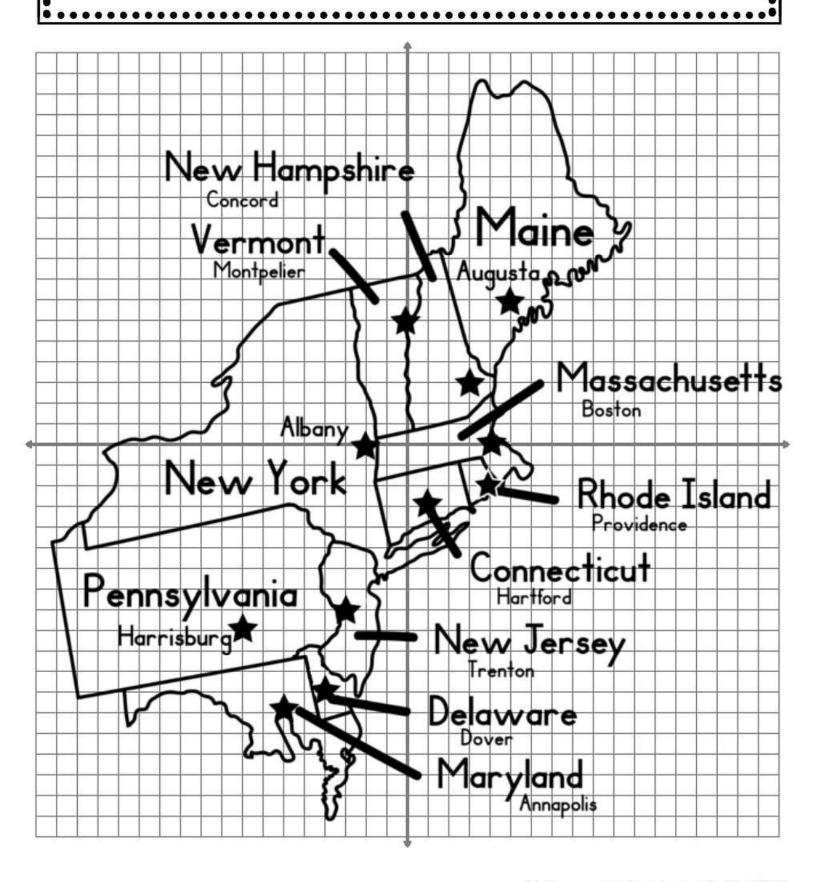
_____

_____

Mixed Transformations Practice with Maps

Directions: Using the "Map of Southeast US", perform the transformations described in order. Then describe an alternative path.

Direction Set A

Start in Atlanta Georgia:

- Dilate by a factor of 3 with a center of dilation at the origin
- Then reflect across the x-axis
- Then translate up 1 unit

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set B

Start in Raleigh, North Carolina:

- Rotate 270 degrees counterclockwise about the origin
- Then reflect across the y-axis
- Then translate down 2 and right 3 units

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set C

Start in Little Rock, Arkansas:

- Translate right 6 units
- Then reflect across the x-axis
- Then rotate 90 degrees clockwise about the origin

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Name: _____

Mixed Transformations Practice with Maps

Directions: Using the "Map of West US", perform the transformations described in order. Then describe an alternative path.

Direction Set A

Start in Salt Lake City, Utah:

- Translate right 1 unit and up 1 unit
- Then dilate by a factor of 6 with a center of dilation at the origin
- Then translate down 1 unit

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set B

Start in Denver, Colorado:

- Rotate 270 degrees counterclockwise about the origin
- Then translate up 15 units and left 10 units
- Then reflect across the x-axis

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Direction Set C

Start in Olympia, Washington:

- Reflect across the y-axis
- Then dilate by a factor of 1/3 with a center of dilation at the origin
- Then translate left 8 units and up 1 unit

Where are you now? _____

Describe an alternative sequence of transformations that would have moved you from the same starting position to your current location:

_____

_____

Map: West US

Map of Midwest US

North Dakota

★ Bismarck

Minnesota

★ Pierre

St. Paul ★

Wisconsin

★ Madison

Michigan

★

Lansing

South Dakota

Iowa

★ Des Moines

Nebraska

Ohio

★ Lincoln

Indianapolis

★ Springfield

Indiana

★

Columbus

★

Topeka ★

★

Illinois

Kansas

Jefferson City

Missouri

Map of Northeast US

New Hampshire
Concord

Vermont
Montpelier

Maine
Augusta

Massachusetts
Boston

Albany

New York

Rhode Island
Providence

Connecticut
Hartford

Pennsylvania
Harrisburg

New Jersey
Trenton

Delaware
Dover

Maryland
Annapolis

Map of Southeast US

West Virginia

Charleston

Richmond

Virginia

Washington, D.C.

Frankfort

Kentucky

Raleigh

North Carolina

Nashville

Tennessee

South Carolina

Arkansas

Columbia

Little Rock

Atlanta

Montgomery

Georgia

Jackson

Louisiana

Alabama

Mississippi

Tallahassee

Baton Rouge

Florida

Map of West US

★ Olympia

Washington

★ Salem

Oregon

★ Boise

Idaho

★ Helena

Montana

Wyoming

Nevada

★ Carson City

★ Sacramento

★ Salt Lake City

Utah

Cheyenne ★

★ Denver

Colorado

California