

Latitude and Longitude: Using Positive and Negative Coordinates

Name: _____ Date: _____

THE SIGN RULES

+ latitude = NORTH - latitude = SOUTH + longitude = EAST - longitude = WEST

Coordinates are written (latitude, longitude). Example: (39, -77) means 39° north and 77° west.

A. Label the important lines on the grid

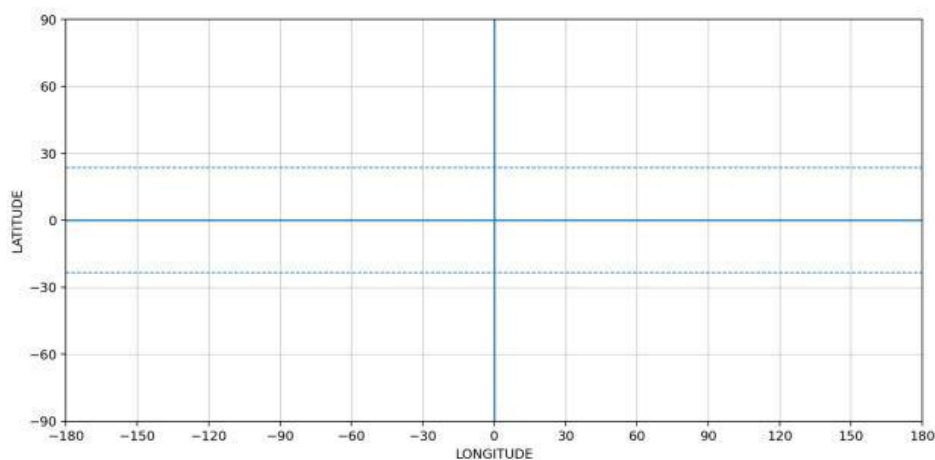
Label the Equator, Prime Meridian, Tropic of Cancer, and Tropic of Capricorn. The Tropics are at about 23.5° north and south.

Equator

Prime Meridian

Tropic of Cancer

Tropic of Capricorn



B. Quick Sign Practice

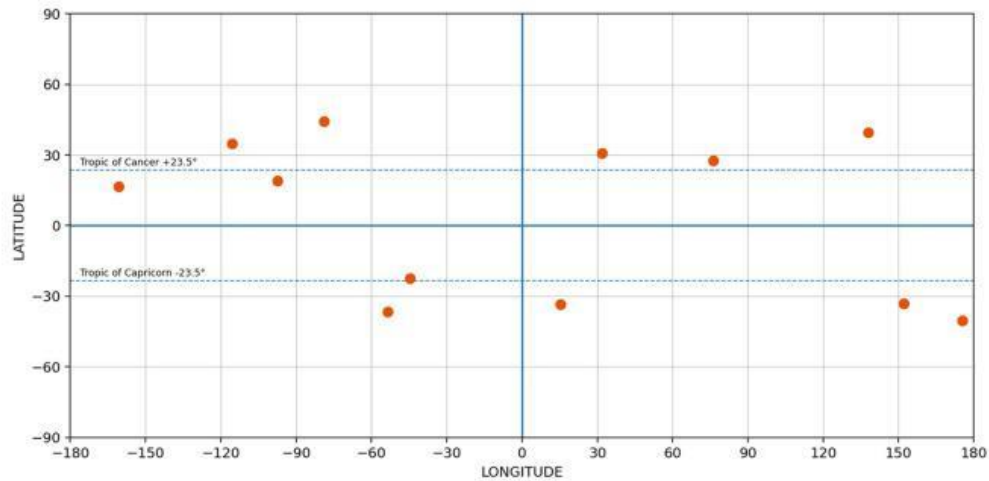
1. A point at -25 latitude is in the _____ Hemisphere.
2. A point at -80 longitude is _____ of the Prime Meridian.
3. Which coordinate is south and east? A. (25, 40) B. (-25, 40) C. (25, -40)
4. Which coordinate is north and west? A. (30, -70) B. (-30, -70) C. (-30, 70)
5. The Equator is _____° latitude. The Prime Meridian is _____° longitude.

Latitude and Longitude Practice

Page 2: Plot the Cities

Plot each city. Latitude comes first. Longitude comes second. Use the + and - signs carefully.

- | | |
|-------------------------------|--------------------------|
| 1. Washington, DC: (39, -77) | 7. Cape Town: (-34, 18) |
| 2. Los Angeles: (34, -118) | 8. New Delhi: (29, 77) |
| 3. Mexico City: (19, -99) | 9. Tokyo: (36, 140) |
| 4. Rio de Janeiro: (-23, -43) | 10. Sydney: (-34, 151) |
| 5. Buenos Aires: (-35, -58) | 11. Honolulu: (21, -158) |
| 6. Cairo: (30, 31) | 12. Auckland: (-37, 175) |



After plotting

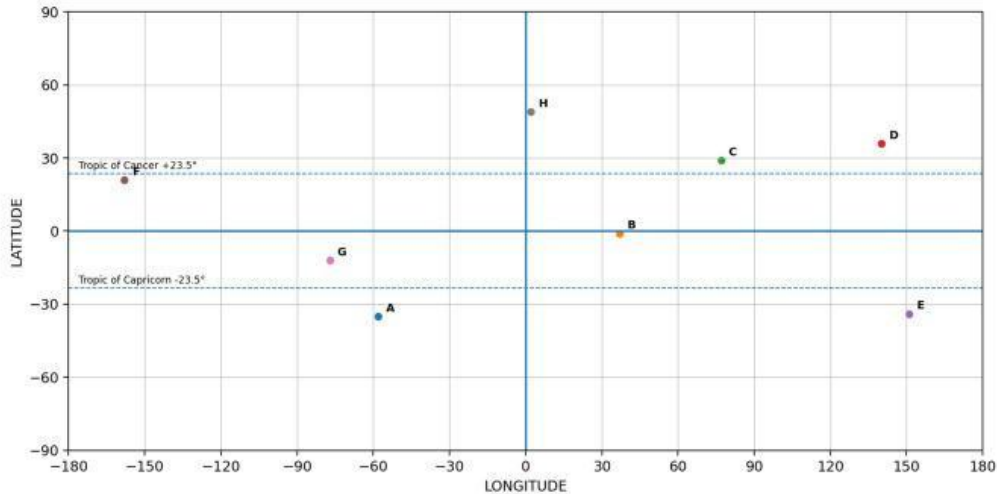
1. Which plotted city is farthest west? _____
2. Name one city in the Southern Hemisphere: _____
3. Name one city with both coordinates negative: _____
4. Which sign tells you a city is west of the Prime Meridian? _____

Latitude and Longitude Practice

Page 3: Read the Points and Identify the Cities

Each letter marks a city. Estimate the coordinates, then use the City Bank to identify the city.

City Bank: Buenos Aires | Nairobi | New Delhi | Tokyo | Sydney | Honolulu | Lima | Paris



Letter	Latitude	Longitude	City
A			
B			
C			
D			
E			
F			
G			
H			

Hemisphere Check

For A through E, write N or S for latitude and E or W for longitude:

A _____ / _____ B _____ / _____ C _____ / _____ D _____ / _____ E _____ / _____

Latitude and Longitude Practice

A. Change N/S/E/W into + and - coordinates

1. 34° S, 18° E = _____

2. 39° N, 77° W = _____

3. 36° N, 140° E = _____

4. 23° S, 43° W = _____

5. 21° N, 158° W = _____

B. Change + and - into N/S/E/W

1. (-35, -58) = _____

2. (30, 31) = _____

3. (-12, -77) = _____

4. (29, 77) = _____

5. (49, 2) = _____

C. Mystery Cities

City Bank: London | Cairo | Cape Town | Singapore | Moscow | Mexico City

1. (52, 0) = _____

4. (1, 104) = _____

2. (30, 31) = _____

5. (56, 38) = _____

3. (-34, 18) = _____

6. (19, -99) = _____

D. Explain What the Signs Tell You

1. In (-34, 151), what does the -34 tell you? _____

2. In (34, -118), what does the -118 tell you? _____

3. Why are + and - signs useful for coordinates? _____