1. Write an integer to represent each situation.
   1. The temperature is 8° below 0°C.
   2. The valley was 700 m below sea level.
   3. Victor spent $89 of his savings.
   4. The plane flew at an altitude of 20 000 m.
   5. Chuck’s golf score was 5 under par.
2. Write the **opposite** of each integer.

a) +7 b) –4 c) +8 d) –17 e) +32

1. A photo of a close finish of a race showed:

• Jan 3 m before the finish line

• Simon 1 m before the finish line

• Bryn 2 m after the finish line

• Nikki 4 m after the finish line.

Suppose 0 represents the finish line. Use first initials to show the position of each racer **on the number line**.

1. **Draw** a picture to model each integer.

a) +4 b) –7 c) +1 d) +6 e) –3

1. **Order** the integers in each set from **least to greatest**.

|  |  |
| --- | --- |
| 1. 0, +6, –6, –10, +9 | 1. +25, +17, –23, –8, +12 |
| 1. +4, –9, +16, –25, +1 | 1. –52, +45, +76, –30, –121 |

1. Order these elevations from **highest to lowest**.

* Caspian Sea Shore: 28 m below sea level
* Elbrus, Russia: 5642 m above sea level
* Lake Assal, Djibouti: 156 m below sea level
* Eurasia Basin, Arctic Ocean: 5450 m below sea level
* McKinley, Alaska: 6194 m above sea level

1. Copy and complete by placing < or > between the sets of integers.

a) –8 –7 b) +9 +20 c) –12 + 4

d) 0 –11 e) –23 –32 f) +15 –3

1. The data show the temperatures in different cities on one day in March. Use these temperatures to answer the questions below.

Victoria: +10°C Calgary: –6°C Regina: +5°C

Winnipeg: –3°C Toronto: +7°C Quebec: –8°C

Moncton: +2°C Halifax: –2°C St. John’s: –7°C

Charlottetown: 0°C Iqaluit: –35°C Whitehorse: –12°C

Yellowknife: –31°C

1. Which city has the **highest** temperature?

b) Which city has the **lowest** temperature?

1. Which cities have temperatures greater than –1°C?

d) Which cities have temperatures between –6°C and +6°C?

e) Which cities have temperatures that are opposite integers?

f) Which cities have temperatures less than 0°C?

g) Which cities have temperatures less than –5°C?