Comparing positive and negative numbers

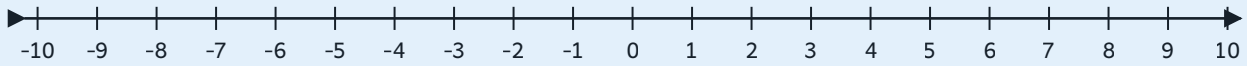
MODULE 1 · PLACE VALUE AND THE DECIMAL NUMBER SYSTEM NUMBER

On a number line, **smaller numbers sit to the left**. So a negative number is always **less** than any positive number, and a number closer to zero is bigger than one further from zero on the negative side.

→ **−3 < 2** (−3 is to the left of 2).
→ **−1 > −5** (−1 is closer to zero, so bigger).
→ **0 > −7** (zero beats every negative number).

TRY IT ON THE LINE

Mark each pair of values, then write < or > between them.



1. **−3** _____ **2**
2. **−1** _____ **−5**
3. **0** _____ **−7**
4. **−4** _____ **−2**
5. **6** _____ **−10**
6. **−9** _____ **4**

PRACTICE

1. On sports day morning, the school weather station logs the temperatures in degrees Celsius at four different times during the week: **6**, **4**, **-4** and **-10**. Order the temperatures from coldest to warmest.

   Order from smallest (most negative) to largest: 6, 4, -4, -10

2. On four winter mornings before training at the local hurling pitch, Tadhg checks the thermometer and writes down the readings in degrees Celsius: **-1**, **15**, **9** and **-10**. Order the temperatures from smallest (coldest) to largest (warmest).

   Order from smallest (most negative) to largest: -1, 15, 9, -10

CHALLENGE

1. The 5th class weather station logs the temperature each morning at the bird feeder for four days. The readings in °C are **-4.1**, **4.8**, **0.1** and **2.9**. Order the temperatures from coldest to warmest.

   Order from smallest (most negative) to largest: -4.1, 4.8, 0.1, 2.9

2. On a school tour to Glendalough in Wicklow, the 5th class checks the thermometer at four different spots during the day. The readings in degrees Celsius are **8.3**, **6.7**, **0.1** and **-4.7**. Order the temperatures from smallest to largest.

   Order from smallest (most negative) to largest: 8.3, 6.7, 0.1, -4.7