

Interpret a comparison of two negative numbers

NAME	DATE	SCORE / 10
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1 Ivy dives to -4 metres and Maya dives to -1 metres, below sea level. So $-1 > -4$. What does this tell you?

- ☐ Maya is above sea level ☐ Maya is nearer the surface than Ivy
☐ Maya is deeper than Ivy

2 At noon it is -20°C where Ana lives and -15°C where Leo lives. So $-15 > -20$. Explain what this tells you about the two places.

3 Ana dives to -4 metres and Ivy dives to -1 metres, below sea level. So $-1 > -4$. What does this tell you?

- ☐ Ivy is nearer the surface than Ana ☐ Ivy is above sea level ☐ Ivy is deeper than Ana

4

At noon it is -18°C where Ben lives and -15°C where Noah lives. So $-15 > -18$. Explain what this tells you about the two places.

5

Ben dives to -4 metres and Maya dives to -1 metres, below sea level. So $-1 > -4$. What does this tell you?

- ☐ Maya is nearer the surface than Ben ☐ Maya is deeper than Ben
☐ Maya is above sea level

6

Ben dives to -5 metres and Ivy dives to -2 metres, below sea level. So $-2 > -5$. Explain what this tells you about the two dives.

7

At noon it is -5°C where Leo lives and -2°C where Ivy lives. So $-2 > -5$. What does this tell you?

- ☐ It is the same temperature where Ivy and Leo live
☐ It is warmer where Ivy lives than where Leo lives
☐ It is colder where Ivy lives than where Leo lives

8

Noah's bank balance is $-\$8$. Maya's bank balance is $-\$2$. So $-2 > -8$. Explain what this tells you about the money Noah and Maya owe.

9

Ben dives to -18 metres and Ivy dives to -3 metres, below sea level. So $-3 > -18$. What does this tell you?

☐ Ivy is deeper than Ben ☐ Ivy is nearer the surface than Ben ☐ Ivy is above sea level

10

Noah dives to -6 metres and Ben dives to -2 metres, below sea level. So $-2 > -6$. Explain what this tells you about the two dives.

Interpret a comparison of two negative numbers

1 Maya is nearer the surface than Ivy

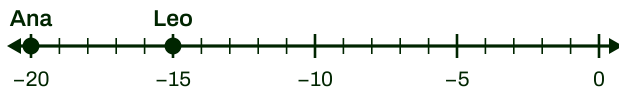
3 Ivy is nearer the surface than Ana

5 Maya is nearer the surface than Ben

7 It is warmer where Ivy lives than where Leo lives

9 Ivy is nearer the surface than Ben

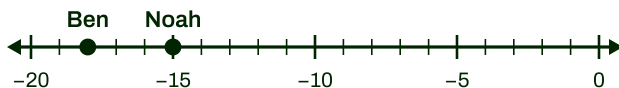
2 A written explanation



A model answer: It is warmer where Leo lives. -15 is greater than -20 because it is nearer 0: it sits to the right of -20 on a number line. A greater temperature is a warmer one, so -15°C is 5 degrees warmer than -20°C .

What counts as right: Counts as right if it makes these points: (1) it is warmer where Leo lives, or colder where Ana lives; (2) the greater number is the one nearer 0, so it is the higher temperature. Saying it is colder where Leo lives, because 15 is less than 20, does not count.

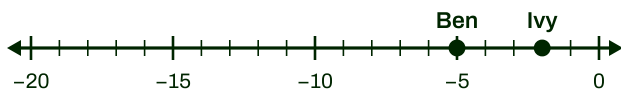
4 A written explanation



A model answer: It is warmer where Noah lives. -15 is greater than -18 because it is nearer 0: it sits to the right of -18 on a number line. A greater temperature is a warmer one, so -15°C is 3 degrees warmer than -18°C .

What counts as right: Counts as right if it makes these points: (1) it is warmer where Noah lives, or colder where Ben lives; (2) the greater number is the one nearer 0, so it is the higher temperature. Saying it is colder where Noah lives, because 15 is less than 18, does not count.

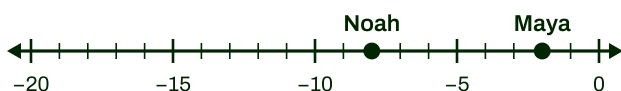
6 A written explanation



A model answer: Ivy is not as deep as Ben: Ivy is 2 metres below sea level and Ben is 5 metres below. -2 is greater than -5 because it is nearer 0: it sits to the right of -5 on a number line. A greater number here is nearer the surface.

What counts as right: Counts as right if it makes these points: (1) Ivy is nearer the surface, or Ben dives deeper; (2) the greater number is the one nearer 0, which is sea level. Saying Ivy dives deeper, by reading 5 and 2 without their signs, does not count.

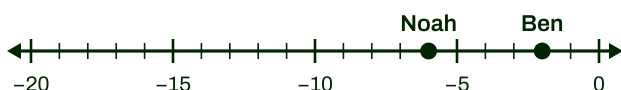
8 A written explanation



A model answer: Maya owes less money than Noah: Maya owes \$2 and Noah owes \$8. -2 is greater than -8 because it is nearer 0: it sits to the right of -8 on a number line. A balance nearer \$0 is a smaller debt.

What counts as right: Counts as right if it makes these points: (1) Maya owes less than Noah, or Noah owes more than Maya; (2) the greater balance is the one nearer \$0, so it is the smaller debt. Saying Maya owes more does not count.

10 A written explanation



A model answer: Ben is not as deep as Noah: Ben is 2 metres below sea level and Noah is 6 metres below. -2 is greater than -6 because it is nearer 0: it sits to the right of -6 on a number line. A greater number here is nearer the surface.

What counts as right: Counts as right if it makes these points: (1) Ben is nearer the surface, or Noah dives deeper; (2) the greater number is the one nearer 0, which is sea level. Saying Ben dives deeper, by reading 6 and 2 without their signs, does not count.