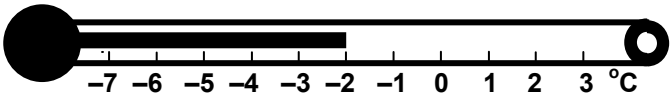
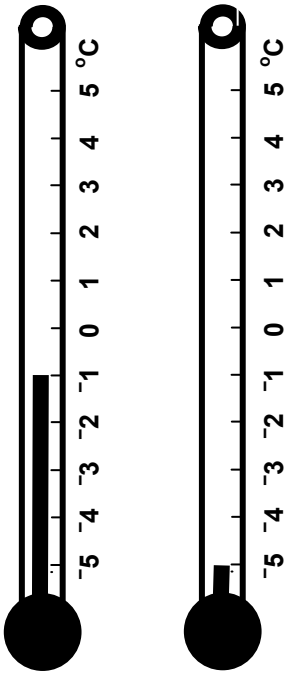
1. What temperature does this thermometer show?

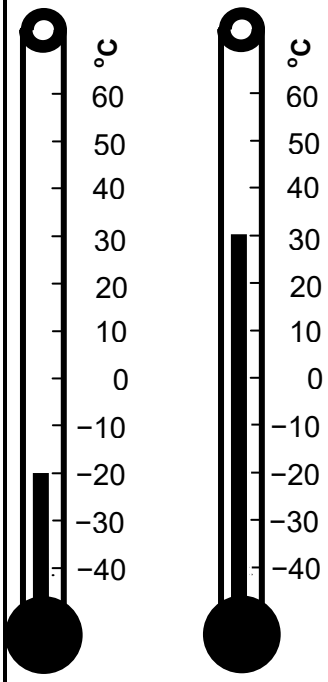


2. What is the difference between **¯4** and **¯1** ?

3. What is the difference between these two temperatures?



4. What is the difference between these two temperatures?



5. A woman has **¯10** dollars in the bank. She takes out another **20** dollars.

How much does she have in the bank now?

6. A diver is under water at **¯22m**. She sinks another **8m**.

Where is she now?

7. The temperature is **13 °C**.

What is the new temperature if it falls by **27°C** ?

8. A diver is under the water at **¯15m**.

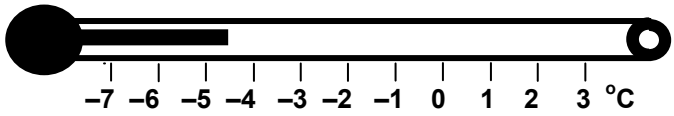
How much must he rise to be at **¯3m**?

9. The tide is **4m** above the average level. It goes down **7m.**

Where is it now?

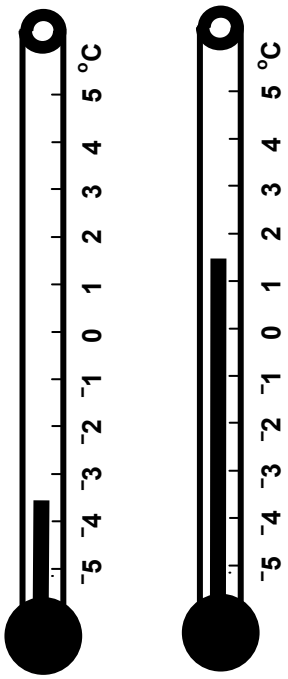
Name:

1. What temperature does this thermometer show?

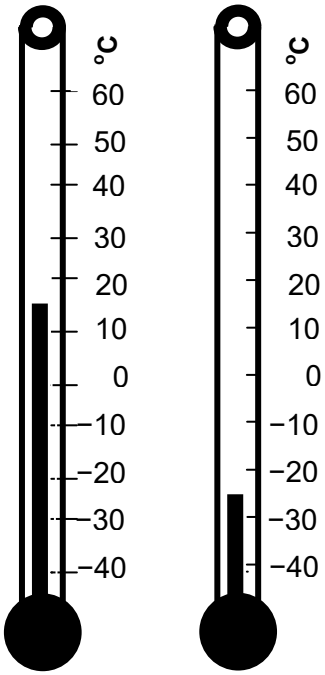


2. What is the difference between **¯7 and 5** ?

3. What is the difference between these two temperatures?



4. What is the difference between these two temperatures?



5. A woman loses **30 francs**. She then loses another **15 francs**. (It's not her day!) How much is she short now?

6. A submarine is under water at **¯76m**. It rises **15m**.

Where is it now?

7. The temperature is **¯12 °C**.

What is the new temperature if it falls by **17°C?**

8. A diver is under the water at **¯5m**. How much must he rise to be on a boat **4m** above the water?

9. The tide is **3.6m** above the average level. It goes down **5.2m.**

Where is it now?

Name:

1. What number is the arrow pointing to:

2. Put these numbers in order, smallest first:

−3, −7, −2, 0, −5

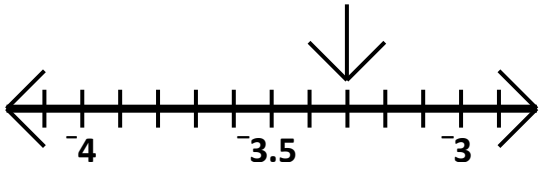
3. Write a whole number between **−4** and **−7.**

4. Which number is above zero?

−6, 5, 0, −3, −2

5. What number is **2** below **−6**?

6. What number is the arrow pointing to:

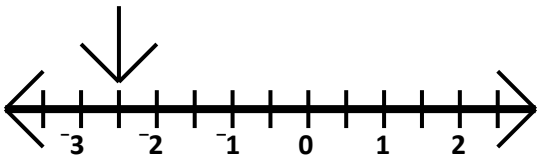


7. What number is

6 above **−1**?

8. If **t < −5** and **t > −8**, what whole numbers could **t** be?

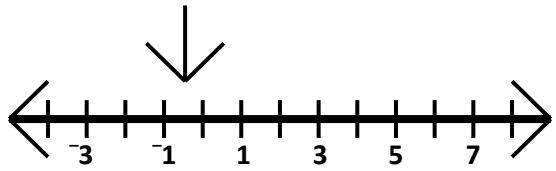
9. What number is the arrow pointing to:



10. Put these numbers in order, largest first:

−6, 3, −8, 0, −4

1. What number is the arrow pointing to:



2. Put these numbers in order, smallest first:

−8.8, 0, −4.3, 7, −1.2

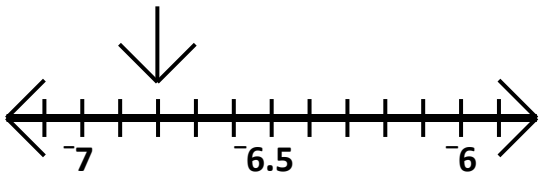
3. Write a decimal number between **−5** and **−6.**

4. Which number is above zero?

−9, −4, 10, −3.1

5. What number is **2.5** below **−9**?

6. What number is the arrow pointing to:

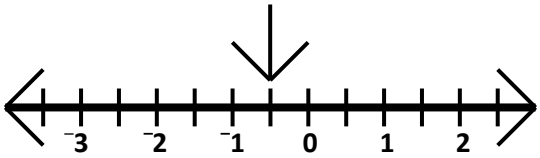


7. What number is

9 above **−7.5**?

8. If **d < −1** and **d > −4**, what whole numbers could **d** be?

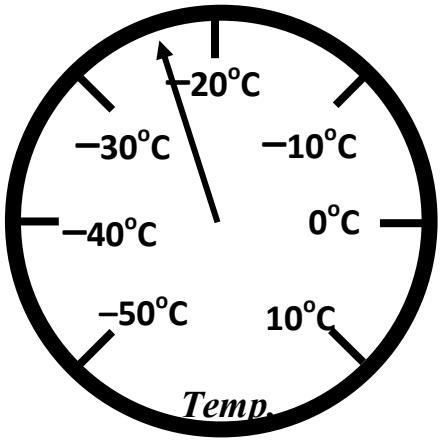
9. What number is the arrow pointing to:



10. Put these numbers in order, largest first:

9, −7.5, −8.5, 10, −7

1. Estimate the temperature on this freezer thermometer.



2. Due to a breakdown the temperature in the freezer in **question 1** begins to rise. It goes up 15°C in 24 hours.

What will the temperature be then?

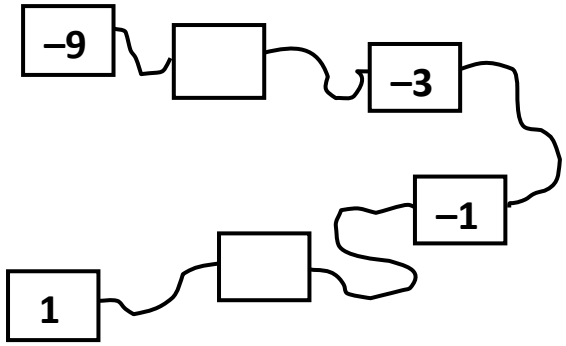
3. △ and □ are two **whole** numbers, positive or negative.

△ + □ = 4

In the table list numbers that make this statement true.

	△	□
eg	−3	7

4. Here is a string of six cards. Write whole numbers on the blank cards so that the numbers are in the correct order.



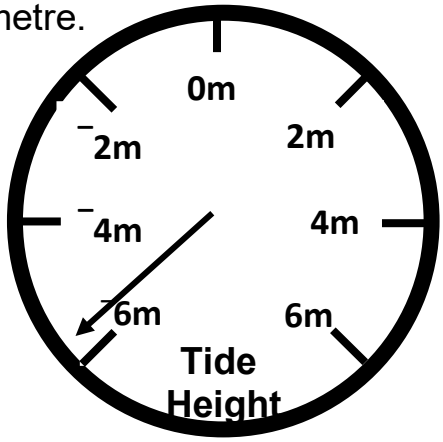
5. If two numbers added together come to zero, what can you say about each pair of numbers?

Try a few examples to investigate this. You may like to start by finding a number that makes this true:

−4 + □ = 0

Name:

1. Estimate the height of the tide on this meter to the nearest half metre.



2. The meter in **question 1** shows the height of the tide **compared with the average height** (0 is average).

A boy flies a kite **16m** above the average height of the tide. How high is the kite above the water level shown on the meter?

3.

○ and ✕ are two **whole** numbers, positive or negative.

$$○ - 6 = ✕$$

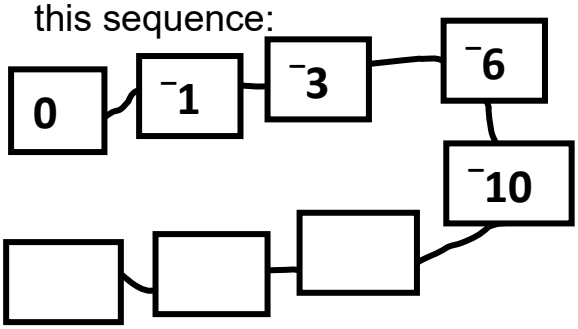
In the table list numbers that make this statement true.
Continue the pattern.

○	✕
9	3
8	2
7	1

4. Write the next three numbers in this sequence:

−6, −8, −10, ___ ___ ___

5. Write the next **three numbers** in this sequence:



Answers

Page 1

1. –2 °C **2.** 3 **3.** 4°C **4.** 50 °C **5.** ⁻30 dollars **6.** ⁻30m

7. –14 °C **8.** 12m **9.** 3m below average

Page 2

1. –4.5 °C **2.** 12 **3.** 5°C **4.** 40 °C **5.** 45 Francs **6.** ⁻61m

7. –29 °C **8.** 9m **9.** 1.6m below average

Page 3

1. ⁻2 **2.** ⁻7, ⁻5, ⁻3, ⁻2, 0 **3.** Either ⁻5 or ⁻6

4. 5 **5.** ⁻8 **6.** ⁻3.3 **7.** 5 **8.** ⁻6 or ⁻7

9. ⁻2.5 **10.** 3, 0, ⁻4, ⁻6, ⁻8

Page 4

1. ⁻0.5 **2.** ⁻8.8, ⁻4.3, ⁻1.2, 0, 7 **3.** Anything beginning with ⁻5. eg ⁻5.3 or ⁻5.284 **4.** 10 **5.** ⁻11.5 **6.** ⁻6.8 **7.** 1.5

8. ⁻2 or ⁻3 **9.** ⁻0.5 **10.** 10, 9, ⁻7, ⁻7.5, ⁻8.5

Page 5

1. ⁻24 °C (Accept ⁻23 or ⁻24 °C) **2.** ⁻9 °C (Accept ⁻8 or ⁻9°C)

3. Any numbers that total 4 such as ⁻4 and 8, but encourage children to write them out sequentially.

4. First number must be one of: ⁻8, ⁻7, ⁻6, ⁻5 or ⁻4. Second number must be 0.

5. Conclusion should be along the lines of: Each pair has a negative and positive value of the same number eg ⁻4 and 4.

Page 6

1. ⁻6m **2.** 21.5m to 22m **3.** Pairs continue as (6, 0) (5, ⁻1) (4, ⁻2) (3, ⁻3)

4. –12, –14, –16

5. ⁻15, ⁻21, ⁻28