

# Year 5: Negative numbers: temperatures, depths and bank balances: worksheet

Year 5 - Place Value to 1,000,000 - Lesson 1.4

Name: \_\_\_\_\_

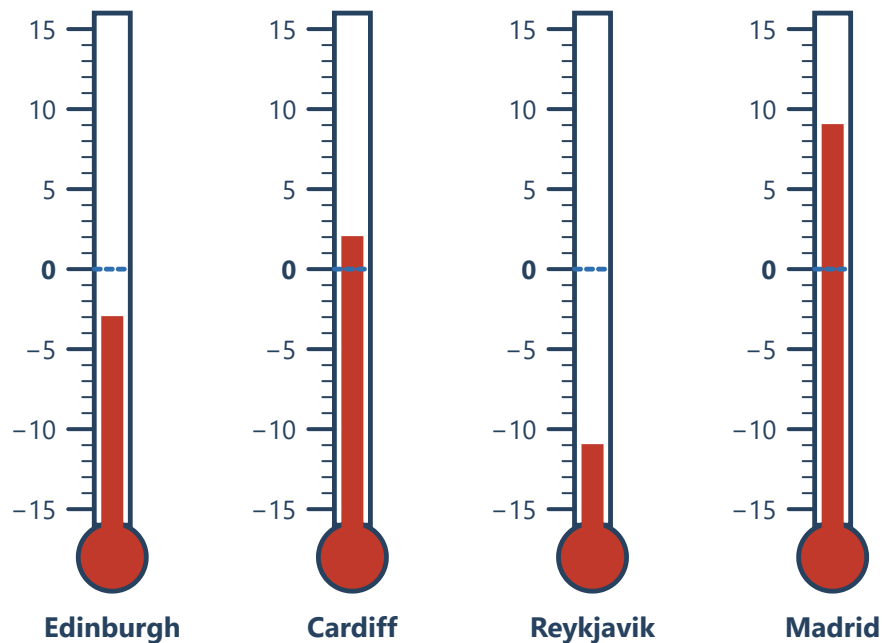
Date: \_\_\_\_\_

Score: \_\_\_\_\_

17 questions. Write your answers in the spaces. Answers and step-by-step help are free at [websink.site/ks2-sats/maths/year-5/ch01-place-value/negative-numbers-temperatures-depths-and-bank-balances/](https://websink.site/ks2-sats/maths/year-5/ch01-place-value/negative-numbers-temperatures-depths-and-bank-balances/)

## Exercise 1D Negative numbers Non-calculator

1 The thermometers show the temperature in four cities one morning.



(a) Which city is the coldest?

Answer: \_\_\_\_\_

(b) Which city is the warmest?

Answer: \_\_\_\_\_

(c) How many degrees warmer is Cardiff than Edinburgh?

Answer: \_\_\_\_\_

(d) What is the difference in temperature between Madrid and Reykjavik?

Answer: \_\_\_\_\_

(e) Write the cities in order, coldest first.

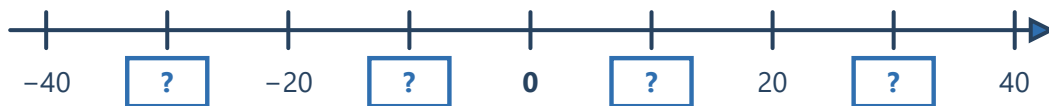
Answer: \_\_\_\_\_

2 What temperature does the thermometer show?



Answer: .....

**3** Write the missing numbers in the boxes on the number line.



Answer: .....

**4** Count on or back. Write the next five numbers each time.

**(a)** Count back in 3s from 10.

Answer: .....

**(b)** Count on in 5s from -22.

Answer: .....

**(c)** Count back in 10s from 25.

Answer: .....

**(d)** Count on in 4s from -18.

Answer: .....

**5** Write < or > in each box.

**(a)** -3 [?] 2

Answer: .....

**(b)** -17 [?] -7

Answer: .....

**(c)** 0 [?] -1

Answer: .....

(d)  $-25$  [ ? ]  $-52$

Answer:

(e)  $-100$  [ ? ]  $10$

Answer:

(f)  $-6$  [ ? ]  $-60$

Answer:

**6 Write each set of numbers in order.**

(a)  $-14, 6, -2, -20, 9, 0$  (smallest first)

Answer:

(b)  $-35, -3, -53, 5, 35$  (biggest first)

Answer:

**7 What is the new temperature?**

(a) It is  $6^{\circ}\text{C}$ . It falls by  $11^{\circ}\text{C}$ .

Answer:

(b) It is  $-3^{\circ}\text{C}$ . It rises by  $9^{\circ}\text{C}$ .

Answer:

(c) It is  $-12^{\circ}\text{C}$ . It rises by  $5^{\circ}\text{C}$ .

Answer:

(d) It is  $4^{\circ}\text{C}$ . It falls by  $15^{\circ}\text{C}$ .

Answer:

**8 Find the difference between the two temperatures.**

(a)  $-4^{\circ}\text{C}$  and  $9^{\circ}\text{C}$

Answer:

(b)  $-13^{\circ}\text{C}$  and  $-2^{\circ}\text{C}$

Answer:

(c)  $-21^{\circ}\text{C}$  and  $6^{\circ}\text{C}$

Answer:

(d)  $5^{\circ}\text{C}$  and  $-17^{\circ}\text{C}$

Answer:

(e)  $-30^{\circ}\text{C}$  and  $-5^{\circ}\text{C}$

Answer:

9 Zainab's bank statement is shown below.

| What happened          | Money in | Money out | Balance |
|------------------------|----------|-----------|---------|
| Opening balance        |          |           | –£30    |
| Birthday money paid in | £85      |           | £55     |
| Bought a book          |          | £60       | –£5     |
| Pocket money paid in   | £20      |           | ?       |
| Bought a game          |          | £45       | ?       |

(a) What is her balance after the pocket money is paid in?

Answer:

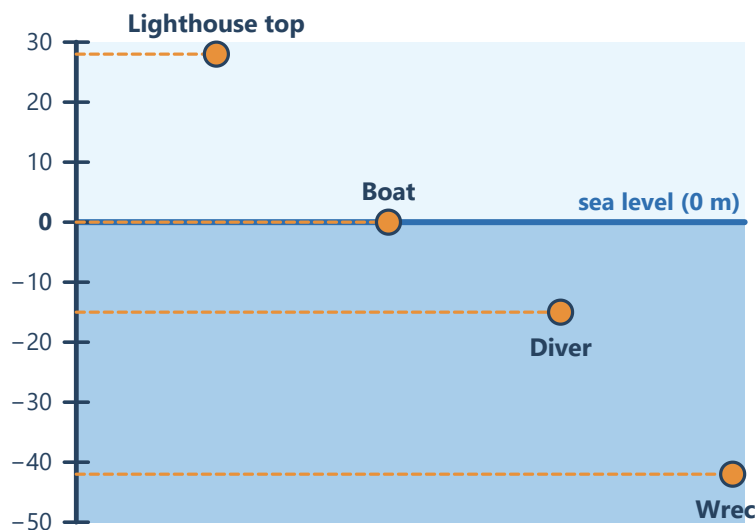
(b) What is her balance after she buys the game?

Answer:

(c) How much must she pay in to get her balance back to £0?

Answer:

10 The picture shows a lighthouse, a boat, a diver and a wreck.



(a) How far is the wreck below the boat?

Answer:

(b) How far is it from the top of the lighthouse to the diver?

Answer:

(c) The diver dives another 12 m. What is her position now?

Answer:

11 A building has floors numbered from –2 (the car park) to 8.

(a) A lift starts on floor 5 and goes down 8 floors. Which floor is it on now?

Answer:

(b) A cleaner goes from floor –2 up to floor 6. How many floors does she go up?

Answer:

- 12** A freezer at  $-18^{\circ}\text{C}$  is switched off. The temperature inside rises by  $3^{\circ}\text{C}$  every hour. After how many hours is it first **above**  $0^{\circ}\text{C}$ ?

Answer: .....

- 13** At midnight the temperature is  $-9^{\circ}\text{C}$ . By 6 a.m. it has risen by  $4^{\circ}\text{C}$ . By noon it has risen by another  $11^{\circ}\text{C}$ . By 6 p.m. it has fallen by  $8^{\circ}\text{C}$ .

(a) What is the temperature at noon?

Answer: .....

(b) What is the temperature at 6 p.m.?

Answer: .....

(c) What is the difference between the lowest and the highest temperatures of the day?

Answer: .....

- 14** The temperature rises from  $-6^{\circ}\text{C}$  to  $4^{\circ}\text{C}$ . Aisha says it has risen by  $2^{\circ}\text{C}$ . What mistake has she made? What is the correct answer?

Answer: .....

- 15** Is this always, sometimes or never true?

"If you take a number away from 5, the answer is positive."

Answer: .....

- 16** Which one is different?  $-7^{\circ}\text{C}$   $7^{\circ}\text{C}$  below zero minus seven degrees  $7^{\circ}\text{C}$  above zero

Answer: .....

- 17** Two temperatures are 14 degrees apart. One of them is  $-5^{\circ}\text{C}$ . What could the other temperature be? Find both answers.

Answer: .....