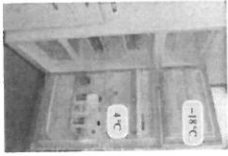


Question 1

In a kitchen, some food is stored at -18°C in a freezer and some at 4°C in the fridge. A roast is cooking in the oven at a temperature of 180°C .



Before answering each of the following questions, draw a number line to show the positions of the temperatures.

- a) What is the difference in temperature between the food stored in the freezer and the food stored in the fridge?

(Hint: Difference = largest value - smallest value)

$$4 - (-18) = 22^{\circ}\text{C difference}$$

face
walk
end backwards

- b) What is the difference in temperature between the food stored in the fridge and the roast cooking in the oven?

$$180 - 4 = 176^{\circ}\text{C difference}$$

- c) What is the difference in temperature between the food stored in the freezer and the roast cooking in the oven?

$$180 - (-18) = 198^{\circ}\text{C difference}$$

Question 2

The following is a homework sheet done by a student in Year 7. Correct her work for her and give her a mark out of six. Make sure you include the correct answer if her answer is wrong.

a. $-3 + -7 = -10$ ✓

b. $-4 - -10 = -6$ ✗

c. $-7 - 8 = 15$ ✓

d. $70 + (-180) = 110$ ✗

e. $42 + 7 - -11 = 60$ ✓

$-4 - -10 = 6$
 face
walk
end backwards

Think "little birdie" technique!
 • First sign tells you where you should face (+ end or - end)
 • Second sign tells you how to walk (= backwards + = forwards)

Question 3

Complete the following (use your number line) :

a) $2 - 3 =$ 1

b) $-12 + 11 =$ -1

c) $-5 - 2 =$ -7

d) $-8 - 3 =$ -11

Question 4

Susan had \$48 in the bank. She wants to buy a pair of shoes for \$65. How much extra does she need?

$48 \text{ } \oplus \text{ } 65 = -17$ *⊕ walk forward i.e. away from 0*

*face
end*

Susan needs an extra \$17,