Add and Subtract positive and negative numbers

1. Calculate:

(a) $-5 + 8$ (b) $-2 - 11$ (c) $-9 + (-4)$

(d) $18 - (-3)$ (e) $-21 - (-5)$ (f) $8 + (-6)$ [6]

2. The temperature in Aberdeen one morning is -2°C. During the day the temperature rises by 9 degrees.

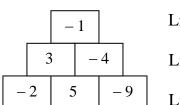What is the temperature now? [1]

3. Yesterday Frank's bank balance was £215. Today it is $-$ £47.

How much has Frank spent? [1]

4. In the triangular number table shown opposite, Line 2 is formed by adding the 2 cells directly below in Line 1. $(-2 + 5 = 3)$ Line 3 is formed by adding the 2 cells directly below in Line 2. $(3 + (-4) = -1)$
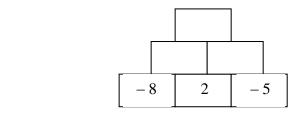
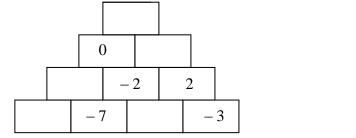|		
	-1	Line 3
3	-4	Line 2
-2	5	-9 Line 1

Using the same rules as above copy and complete the tables below.

(a)

-8	2	-5

[3]

(b)

0		
	-2	2
-7		-3

[6]

5. Freezers operate at different temperatures depending on their star ratings. A 1 star freezer operates at -6°C and a 2 star at -12°C.

What is the difference in the operating temperatures of these two freezers? [1]

[22 marks]