2.3 Revision of Negative Numbers

1. *Without a calculator*, answer the following questions.

(a)	$5 - 2$	(b)	$-5 + 6$	(c)	$-7 + 4$
(d)	$12 - 14$	(e)	$-10 + (-5)$	(f)	$-10 - (-5)$
(g)	$-15 - 5$	(h)	$16 - (-8)$	(i)	$4 \times (-2)$
(j)	$(-4) \times (-2)$	(k)	$(-8) \times 3$	(l)	$(-10) \times (-5)$
(m)	$14 \div (-7)$	(n)	$(-10) \div 2$	(o)	$(-10) \div (-2)$
(p)	$20 \div (-5)$	(q)	$(-15) \div (-3)$	(r)	$(-16) \div 4$

2. Evaluate, *without using a calculator*:

(a)	$(-2)^2$	(b)	$(-1) \times 1$	(c)	$(-1) \times (-1)$
(d)	$(-4)^2$	(e)	$3^2 + (-4)^2$	(f)	$(-6)^2 + (-8)^2$
(g)	$(-1)^2 \div (-2)^2$	(h)	$(-2)^2 \times (-3)^2$		
(i)	$4 \times (-5) + \big((-100) \div (-4)\big)$			(j)	$(-20) \div (-5) + (-2)^2$
(k)	$\sqrt{(-3)^2 + (-4)^2}$			(l)	$\big[(-3) \times (-4)\big] \div (-2)$
(m)	$(-2)^3$	(n)	$(-1)^2 \times (-1)$	(o)	$(-5)^3$

3. The outside temperature was monitored every 4 hours for one day. Here is the recorded information.

Time	Temperature °C
00.00	−11
04.00	−7
08.00	−1
12.00	5
16.00	6
20.00	0
24.00	−5

(a) What is the difference between the lowest and highest temperatures?

(b) What is the difference between the temperature at

(i)	04.00 and 08.00	(ii)	04.00 and 12.00
(iii)	16.00 and 24.00	(iv)	08.00 and 20.00
(v)	00.00 and 24.00	(vi)	20.00 and 24.00?