Reading Quiz §5

1. [1] Identify a subgroup in the Klein 4 group V. Recall that the Cayley table for V is:

V	e	a	b	c
e	e	a	b	c
a	a	e	c	b
b	b	c	e	a
c	c	b	a	e

2. [3] Consider the group of integers modulo 8 with modular addition, $(\mathbb{Z}_8, \oplus)$. If possible, find subgroups of $\mathbb{Z}_8$ of order:

   (a) 2

   (b) 3

3. [1] Describe the Quaternion Group briefly. For example, what is it's order? Is it a subgroup of anything? Write down something that you know about it.