#1.
a) Write the appropriate save instruction to allocate stack space for the following local variables and any padding.

```c
char a;
short b;
long c;
char d;
char e;
unsigned short f;
```

```
save _______ , ______________________________ , _________
(Use the formula, not an absolute value)
```

b) Write the appropriate unoptimized SPARC assembly instructions using the above local variables.

```assembly
e = a;
```

```assembly
f = 0xBABE;
```

```assembly
c = b;
```

```assembly
d = 'C';
```

(OVER)
#2. a) Write the appropriate save instruction to allocate stack space for the following local variable declaration.

```
unsigned long a[6];
```

```
save __________ , ______________________________  , __________
(Use the formula, not an absolute value)
```

b) Write the appropriate instructions to perform the following assignment statements.

```
a[5] = a[3];
```

```
________________________
________________________
```

```
a[1] = a[4];
```

```
________________________
________________________
```

```
unsigned long *ptr; /* ptr mapped to %l4 */
ptr = &a[2];
```

```
________________________
```

```
++ptr; /* ptr mapped to %l4 */
```

```
________________________
```

```
unsigned long d = *ptr; /* d mapped to %l2; ptr to %l4 */
```

```
________________________
```

```
*ptr = d; /* d mapped to %l2; ptr to %l4 */
```

```
________________________
```

#3. Give the equivalent C array expression for the following pointer expression.

```
*(a + 4) is equivalent to _______________________________ (equivalent array expression).
```