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

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

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

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

```asm
f = e;
```

```asm
b = 0xFEED;
```

```asm
d = c;
```

```asm
a = 'A';
```

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

```c
short a[4];
```

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

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

```c
a[3] = a[1];
```

```c
________________________
________________________
```

```c
a[0] = a[2];
```

```c
________________________
________________________
________________________
```

```c
short *ptr; /* ptr mapped to %l4 */
```

```c
ptr = &a[2];
```

```c
________________________
```

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

```c
________________________
```

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

```c
________________________
```

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

```c
________________________
```

#3. Give the equivalent C array expression for the following pointer expression assuming a is defined as an array.

```c
a is equivalent to __________________ (equivalent array expression).
```