1.
Assume:
```
int x = rand();
int y = rand();
unsigned ux = (unsigned) x;
```

Are the following statements always true?

a.
```
ux >> 3 == ux/8
```

b.
given x > 0,
```
((x << 5) >> 6) > 0
```

c.
```
~x + x >= ux
```

d.
given x & 15 == 11,
```
( ~((x >> 3) & (x >> 2)) << 31) >= 0
```

e.
given ((x < 0) && (x + x < 0))
```
x + ux < 0
```

f.
given ((x < 0) && (y < 0) && (x + y > 0))
```
((x | y) >> 30) == -1
```

2.
Given: x has a 4 byte value of 255
What is the value of the byte with the lowest address in a

a.
big endian system?

b.
little endian system?