

1. $M[R[\%esp]-4] = R[\%esp];$

$R[\%esp] = R[\%esp]-4;$

2.

Operand	Value
<code>%ebx</code>	<code>0x10</code>
<code>0x900</code>	<code>0x8932ff</code>
<code>(%eax)</code>	<code>0x34</code>
<code>8(%eax)</code>	<code>0x12</code>
<code>\$0xA12</code>	<code>0xA12</code>
<code>(%eax,%ecx)</code>	<code>0x5FA</code>
<code>(%eax,%edx,2)</code>	<code>0x12</code>
<code>0x24(%ecx,%ebx,4)</code>	<code>0x8</code>

3.

Instruction	Destination	Value
<code>addl %ecx, %eax</code>	<code>%eax</code>	<code>0x1CF</code>
<code>sarl \$3,%eax</code>	<code>%eax</code>	<code>0x20</code>
<code>subl %edx,(%eax)</code>	<code>0x100</code>	<code>0xC9</code>
<code>decl 0x10(%eax)</code>	<code>0x110</code>	<code>0xA9</code>
<code>imull \$2,(%eax,%edx,4)</code>	<code>0x110</code>	<code>0x154</code>
<code>leal 6(\$eax),%ecx</code>	<code>%ecx</code>	<code>0x106</code>

4. 参考答案:

```
int t = z-y;
```

```
return ((t<<15)>>15)*(x^t);
```

5.

After instruction 2 has finished:

<code>%edx</code>	<code>0x55AA</code>
<code>%esp</code>	<code>0xBFFFFFF9C</code>
<code>%ebp</code>	<code>0xBFFFFFF9C</code>

After instruction 3 has finished:

<code>%edx</code>	<code>0x55AA</code>
<code>%esp</code>	<code>0xBFFFFFF9C</code>
<code>%ecx</code>	<code>0xFFFFF9AA</code>

After instruction 4 has finished:

%edx	0x55AA
%ecx	0xFFFFFFFFAA
%eax	0xFF

After instruction 6 has finished:

%eax	0xFF
%esp	0xBFFFFFFA0
%ebp	0xBFFFFFFC4