

1. f:

```
SMULL  r0, r1, r0, r1
```

```
ASR    r0, r0, 16
```

```
MOV    pc, lr
```

2. f:

```
SXTB   r0, r0
```

```
SXTB   r1, r1
```

```
SDIV   r0, r0, r1
```

```
MOV    pc, lr
```

3. c) $X16 = (31415 \ll 16) / 10000;$