

**Please show all work on this sheet.** Please fold this sheet the long way and write **your name** and **Homework 2** (or **HW 2**) on the outside.

Assume we are running code on a 10-bit machine using two's complement arithmetic for signed integers. A "short" integer is encoded using 6 bits. Fill in the empty boxes in the table below. The following definitions are used in the table:

```
short sy = -20;
int y = sy;
int x = -134;
unsigned ux = x;
```

Note: You need not fill any block marked with "-". Each empty block requires an answer.

Expression	Decimal Representation	Binary Representation
$x$	-134	
-		10 1101 1101
$y$		
$ux$		
$x \gg 2$		
$TMax - TMin$		