

Problem 7: [6 points] Drill problem
Filename: hw1prob7.sv
AndrewID: xd2

```
1 module hw1prob7
2   (input logic a, b, c, d,
3    output logic prime, div3);
4
5   logic p2, p3, p5, p7, p11, p13;
6   logic d0, d3, d6, d9, d12;
7
8   assign num1 = b & ~c & d;
9   assign num2 = ~a & b & d;
10  assign num3 = ~a & ~b & c;
11  assign num4 = ~b & c & d;
12
13  assign d1 = ~a & ~b & ~c & ~d;
14  assign d2 = ~a & ~b & c & d;
15  assign d3 = ~a & b & c & ~d;
16  assign d4 = a & ~b & ~c & d;
17  assign d5 = a & b & ~c & ~d;
18  assign d6 = a & b & c & d;
19
20  assign prime = num1 | num2 | num3 | num4;
21  assign div3 = d1 | d2 | d3 | d4 | d5 | d6;
22
23 endmodule : hw1prob7
24
25
26
```

Problem 8: [6 points] Drill problem
Filename: hw1prob8.sv
AndrewID: xd2

```
1 `default_nettype none
2 module hw1prob7_test;
3
4     logic a, b, c, d, prime, div3;
5
6     hw1prob7 DUT( .a, .b, .c, .d, .prime, .div3 );
7
8     initial begin
9         $monitor("a=%b, b=%b, c=%b, d=%b, prime=%b, div3=%b",
10                a, b, c, d, prime, div3);
11
12         for (int i = 0; i < 16; i++) begin
13             {a, b, c, d} = i;
14             #5;
15         end
16
17         #5 $finish;
18     end
19
20 endmodule: hw1prob7_test
21
22
```

Problem 12: [12 points]

AndrewID: xd2

Compilation Errors:

hw1prob12.sv: file does not exist

Problem 12: [12 points]
Filename: hw1prob12.sv
AndrewID: xd2

File hw1prob12.sv was not found