## CS 3723: Programming Languages

Feb 27, 2012

You Name:

1. Which of the following can be used as patterns in ML programming?
(a) nil
(b) $[3, x]$
(c) $[\mathrm{x}, \mathrm{x}]$
(d) $(2, y, z)$
(e) x 1 :: x2 :: x3
(f) $\{f 1=\mathrm{y} 1, \mathrm{f} 2=\mathrm{y} 2\}$
(g) $x+y$
(h) ref x
2. Which of the following ML programs can be compiled without errors?
(a) fun $\operatorname{sum}(n i l)=0 \mid \operatorname{sum}(x 1:: x 2)=\operatorname{sum}(x 1)+\operatorname{sum}(x 2)$;
(b) fun $\operatorname{sum}(n i 1)=0 \mid \operatorname{sum}(x 1:: x 2)=x 1+\operatorname{sum}(x 2)$;
