QUIZ!

Use a full sheet of $81 / 2 \times 11$ " paper. (Half sheet? Half credit!)
Put only your last name in the far upper left hand corner of the sheet, where a staple would hit it. It's OK to write BIG, just start in the corner!


Keep answers short! Avoid full sentences. Feel free to abbreviate.
2 questions; 3 minutes; 3 points.
Numbering responses may help you avoid overlooking a question.
You may go ahead and number your paper.

## Quiz 12, April 19, 2016 <br> 3 minutes; $1+2$ points

1. Write a predicate same (?A, ?B, ?C) that expresses the relationship that $\mathbf{A}, \mathbf{B}$, and $\mathbf{C}$ are equal.
```
?- same(1,1,1).
true.
?- same(a,X,a).
X = a.
```

2. Write a predicate $\mathrm{p}(+\mathrm{L})$ that prints the elements of L that are integers, one per line. (Use integer (?X) to test.) Be sure it always succeeds!
?- p([10,b,c,2,4]).
10
2
4
true.
3. Write a predicate same (?A, ?B, ?C) that expresses the relationship that $\mathbf{A}, \mathbf{B}$, and $\mathbf{C}$ are equal.
```
same (X,X,X).
```

2. Write a predicate $\mathbf{p}(+\mathrm{L})$ that prints the elements of L that are integers, one per line.

$$
\begin{aligned}
& \mathrm{p}(\mathrm{~L}):-\quad \text { member }(\mathrm{E}, \mathrm{~L}), \text { integer }(\mathrm{E}), \\
& \mathrm{writeln}(\mathrm{E}), \text { fail. } \\
& \mathrm{p}(\mathrm{Z}) .
\end{aligned}
$$

