Harper — EIWL Sections 39, 40

Section 39

```
In[161]:=
        x = RandomInteger[100]
Out[161]=
In[162]:=
        {x, x+1, x+2, x^2}
Out[162]=
        {39, 40, 41, 1521}
In[163]:=
        Clear[x]
In[164]:=
        x := RandomInteger[100]
In[165]:=
        {x, x+1, x+2, x^2}
Out[165]=
        {69, 89, 31, 5041}
 Section 40
In[166]:=
        f[n_] := n^2
In[167]:=
        poly[a_] := Graphics[Style[RegularPolygon[a], Orange]]
In[168]:=
        f[b_, c_] := {c, b}
In[169]:=
       f[d_{-}, e_{-}] := \frac{de}{d+e}
In[170]:=
        f[f_{-}, g_{-}] := \{f + g, f - g, f/g\}
In[171]:=
        evenodd[h_] := If[EvenQ[h], Black, White]; evenodd[0] = Red
Out[171]=
In[172]:=
        f[i_{-}, j_{-}, k_{-}] := f[1, _{-}, _{-}] = j + k; f[2, _{-}, _{-}] = j * k; f[3, _{-}, _{-}] = j * k
Out[172]=
```

```
In[173]:=
       fibonacci[l_] := fibonacci[l - 1] + fibonacci[l - 2]; fibonacci[0] = 1; fibonacci[1] = 1
Out[173]=
       1
In[174]:=
       animal[m_] := Interpreter["Animal"][m]["Image"]
In[175]:=
In[176]:=
       animal["cat"]
Out[176]=
In[177]:=
       nearwords[n_, o_] := Nearest[WordList[], n, o]
In[178]:=
       nearwords["cat", 5]
Out[178]=
       {cat, at, bat, cab, cad}
In[179]:=
```