

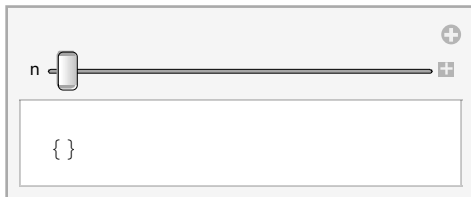
Jeremy — PS 3 — 2025-01-24

EIWL3 Section 9 Questions

In[194]:=

```
Manipulate[Range[n], {n, 0, 100}]
```

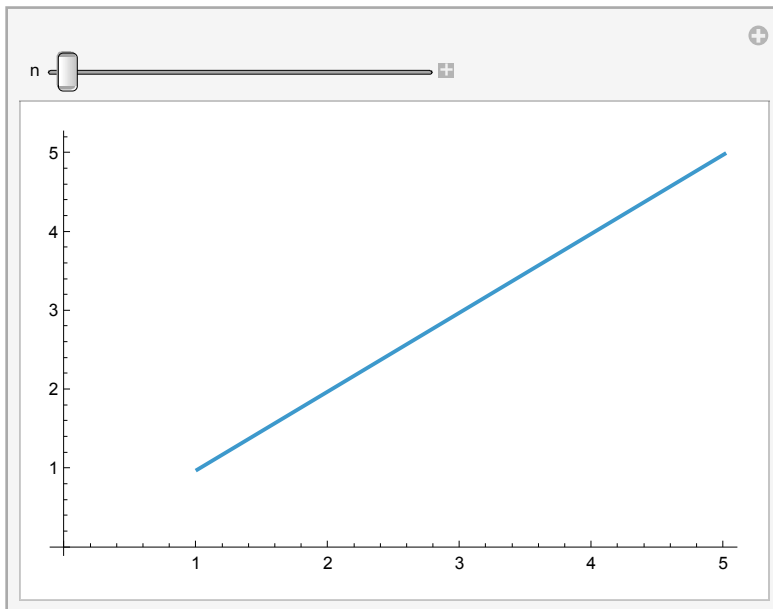
Out[194]=



In[195]:=

```
Manipulate[ListLinePlot[Range[n]], {n, 5, 100, 1}]
```

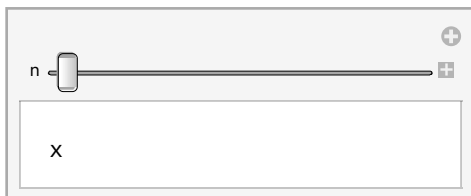
Out[195]=



In[196]:=

```
Manipulate[Column[Table[x, n]], {n, 1, 10}]
```

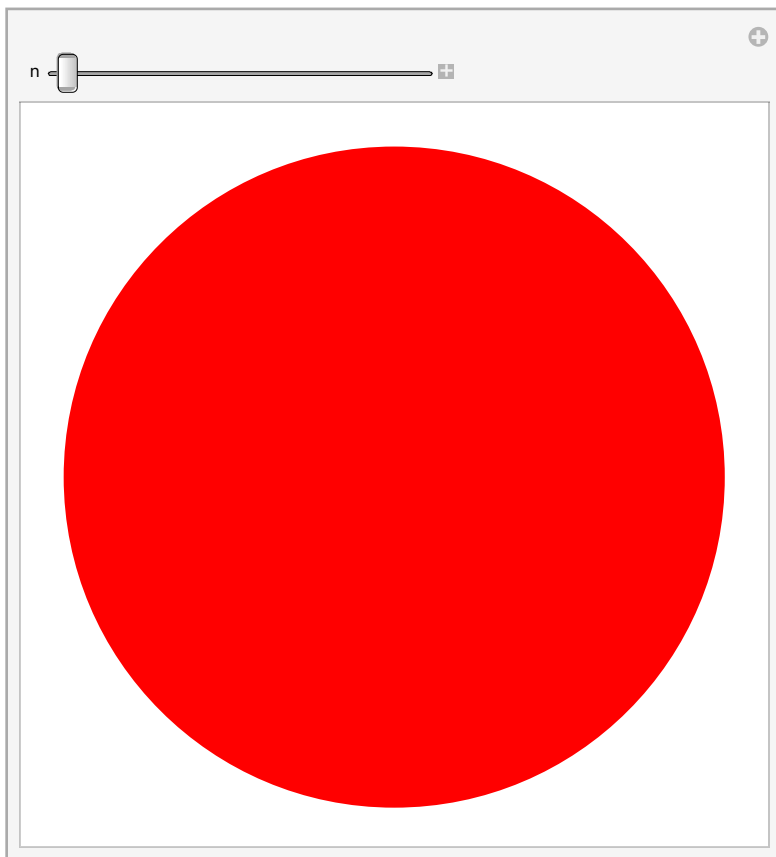
Out[196]=



In[197]:=

```
Manipulate[Graphics[Style[Disk[], Hue[n]]], {n, 0, 1}]
```

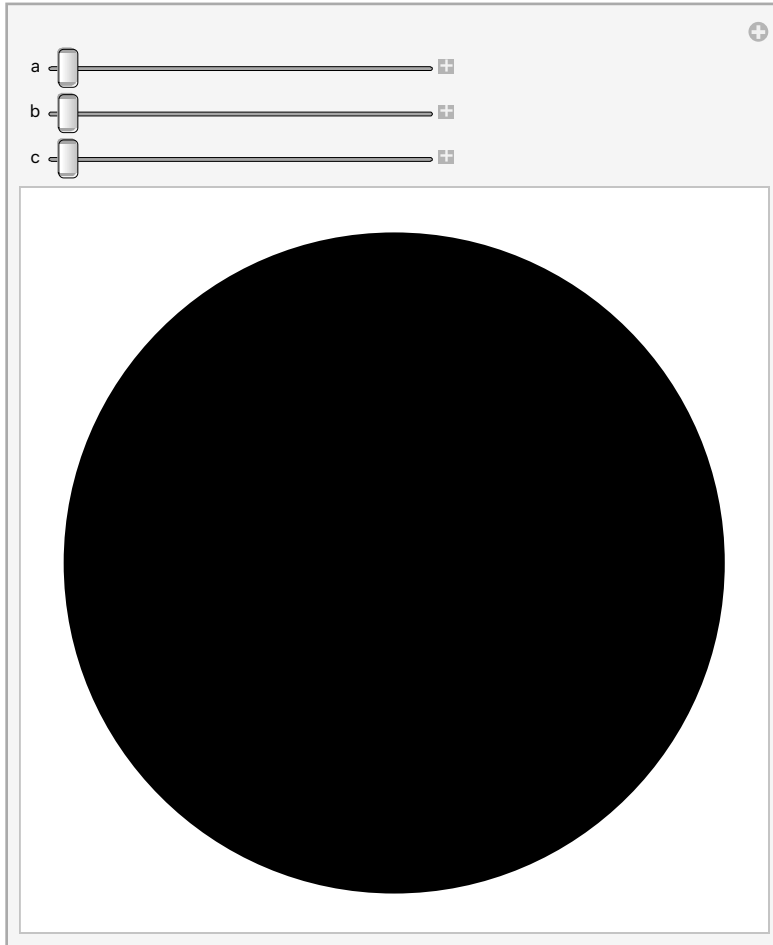
Out[197]=



In[198]:=

```
Manipulate[Graphics[Style[Disk[], RGBColor[a, b, c]]], {a, 0, 1}, {b, 0, 1}, {c, 0, 1}]
```

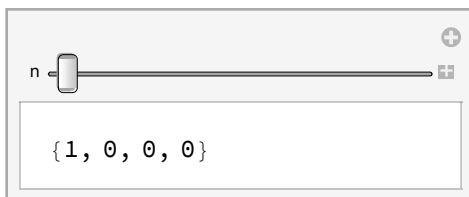
Out[198]=



In[199]:=

```
Manipulate[IntegerDigits[n], {n, 1000, 9999, 1}]
```

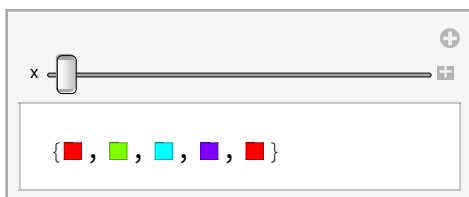
Out[199]=



In[200]:=

```
Manipulate[Table[Hue[n], {n, 0, 1, 1/x}], {x, 4, 49}]
```

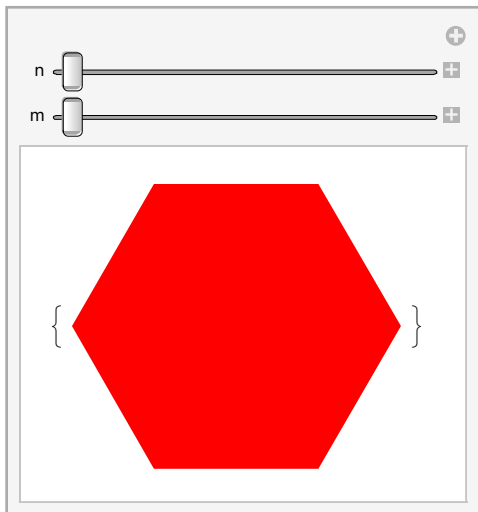
Out[200]=



In[201]:=

```
Manipulate[Table[Graphics[Style[RegularPolygon[6], Hue[n]]], m],  
  {n, 0, 1}, {m, 1, 10}]
```

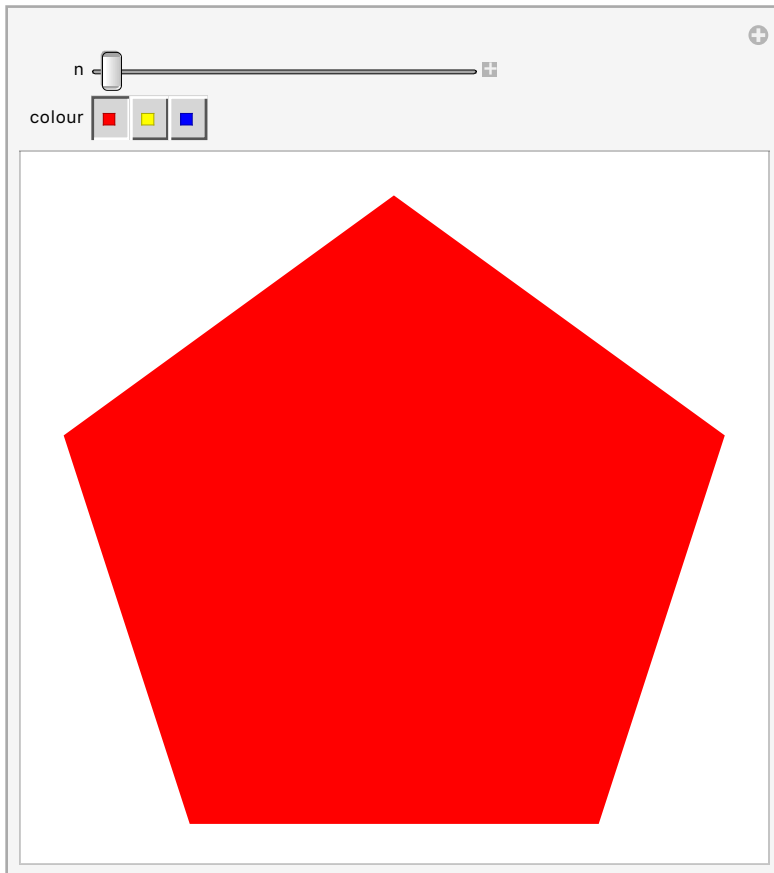
Out[201]=



In[202]:=

```
Manipulate[Graphics[Style[RegularPolygon[n], colour]],  
  {n, 5, 20}, {colour, {Red, Yellow, Blue}}]
```

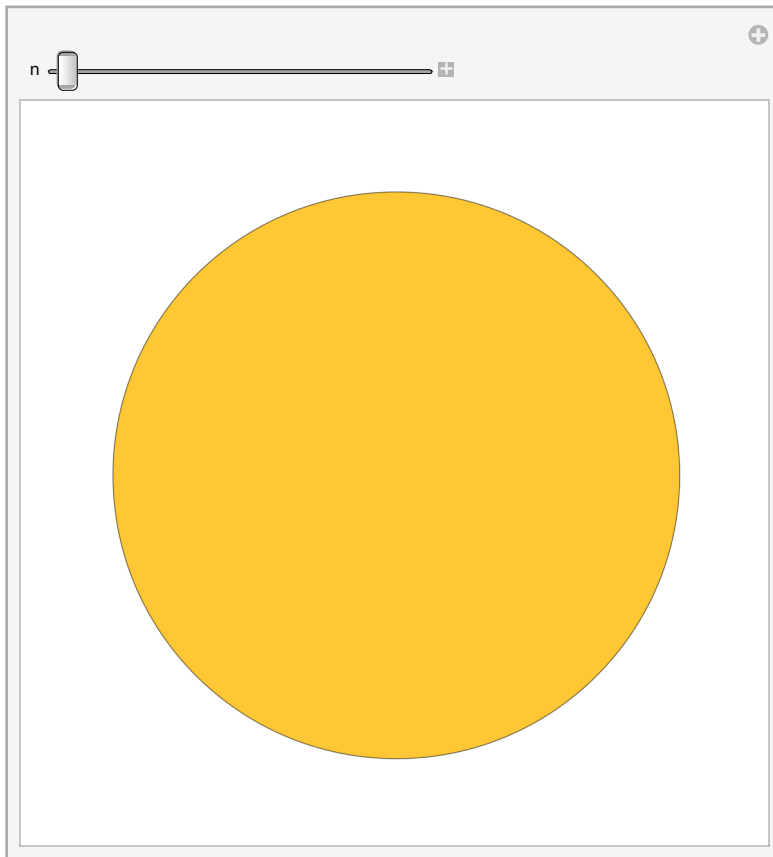
Out[202]=



In[203]:=

```
Manipulate[PieChart[Table[1, n]], {n, 1, 10}]
```

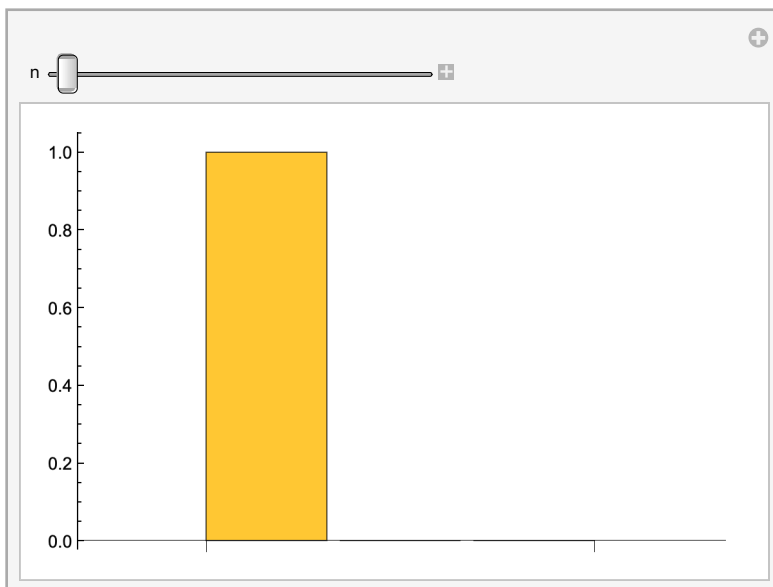
Out[203]=



In[204]:=

```
Manipulate[BarChart[IntegerDigits[n]], {n, 100, 999, 1}]
```

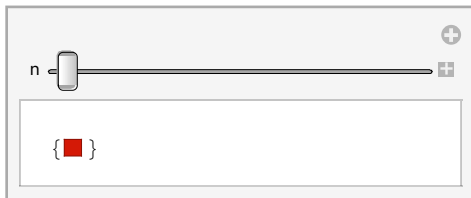
Out[204]=



In[205]:=

Manipulate[Table[RandomColor[], n], {n, 1, 50}]

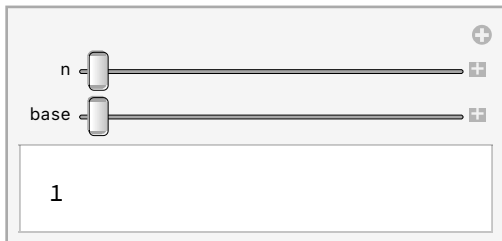
Out[205]=



In[206]:=

Manipulate[Column[Table[base^a, {a, 1, n, 1}]], {n, 1, 10, 1}, {base, 1, 25, 1}]

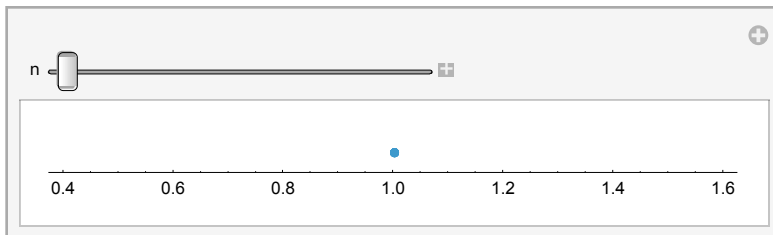
Out[206]=



In[207]:=

Manipulate[NumberLinePlot[Table[x^n, {x, 10}]], {n, 0, 5}]

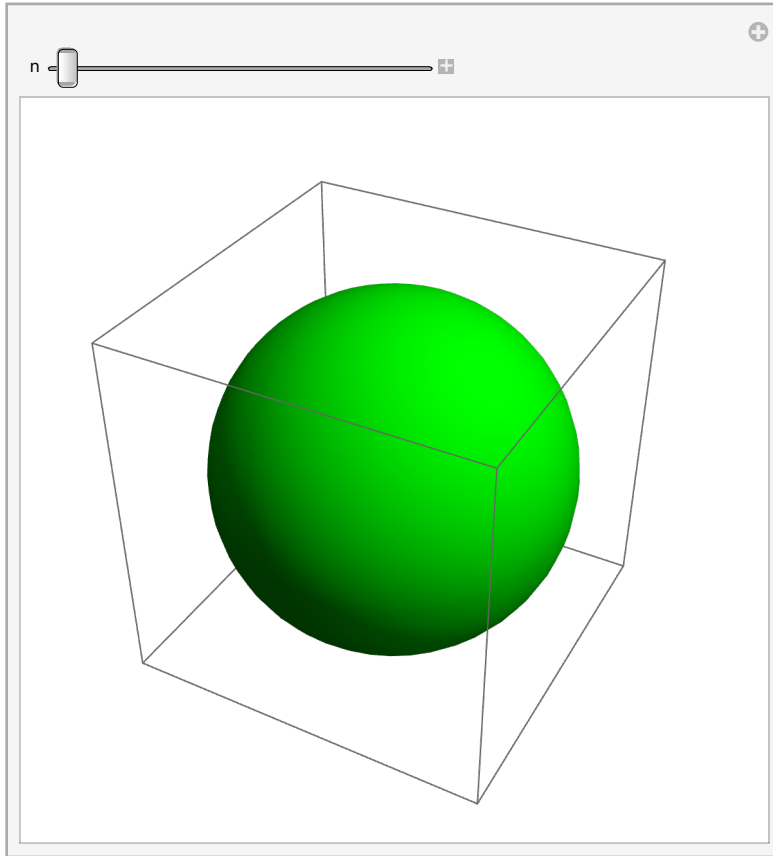
Out[207]=



In[208]:=

```
Manipulate[Graphics3D[Style[Sphere[], RGBColor[n, 1 - n, 0]], {n, 0, 1}]
```

Out[208]=



EIWL3 Section 10 Questions

In[209]:=

```
ColorNegate[EdgeDetect[😊]]
```

Out[209]=



In[210]:=

```
Manipulate[Blur[😊, n], {n, 0, 20}]
```

Out[210]=



In[211]:=

```
Table[EdgeDetect[Blur[☺, n]], {n, 1, 10}]
```

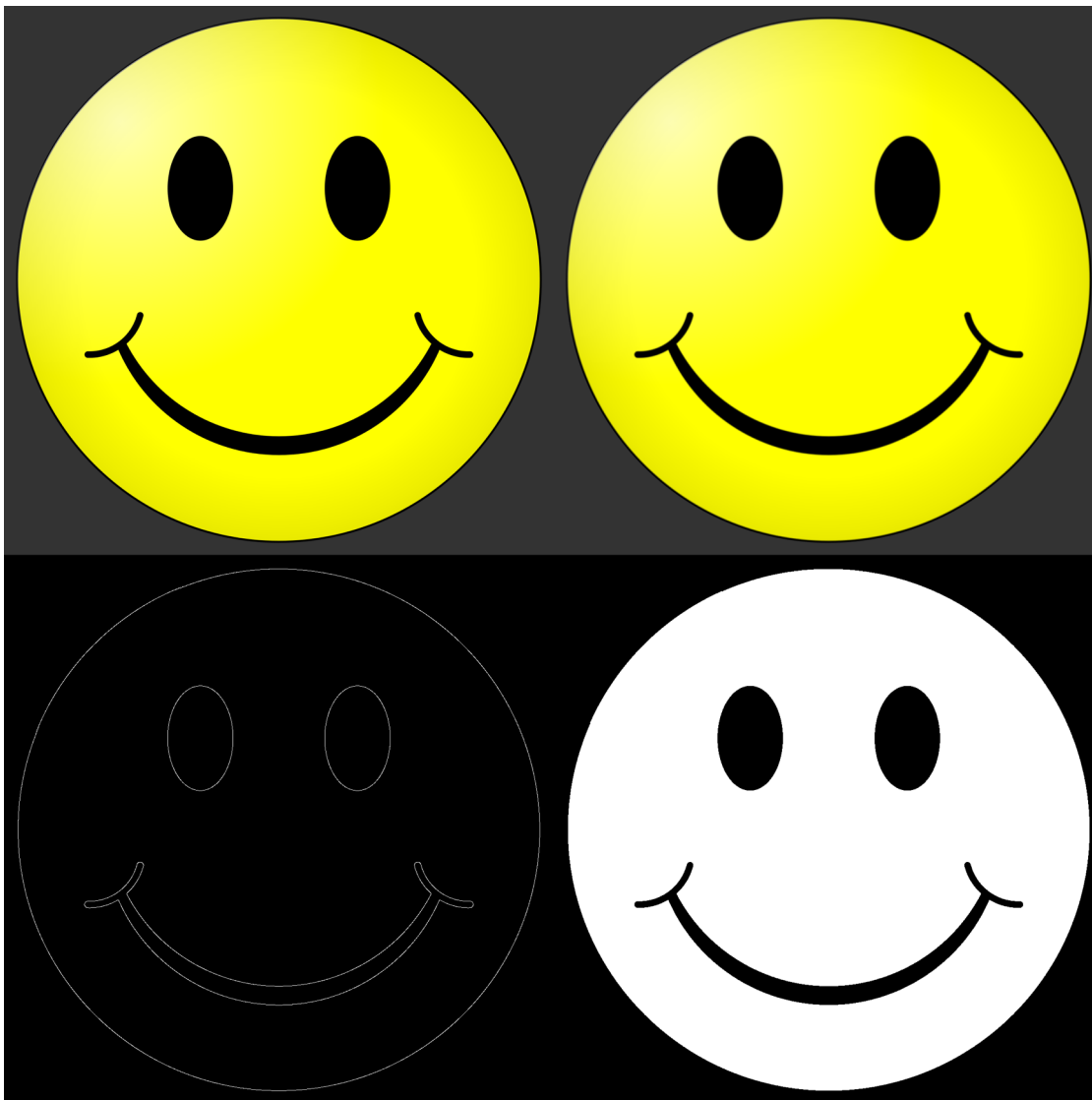
Out[211]=



In[212]:=

```
ImageCollage[{{☺, Blur[☺], EdgeDetect[☺], Binarize[☺]}]}
```

Out[212]=



In[213]:=

```
ImageAdd[Binarize[☺], ☺]
```

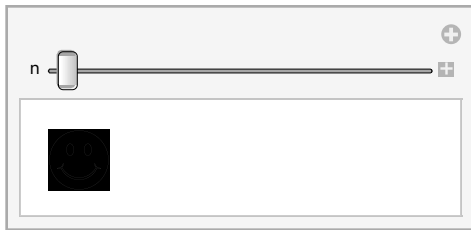
Out[213]=



In[214]:=

```
Manipulate[EdgeDetect[Blur[☺, n]], {n, 0, 20}]
```

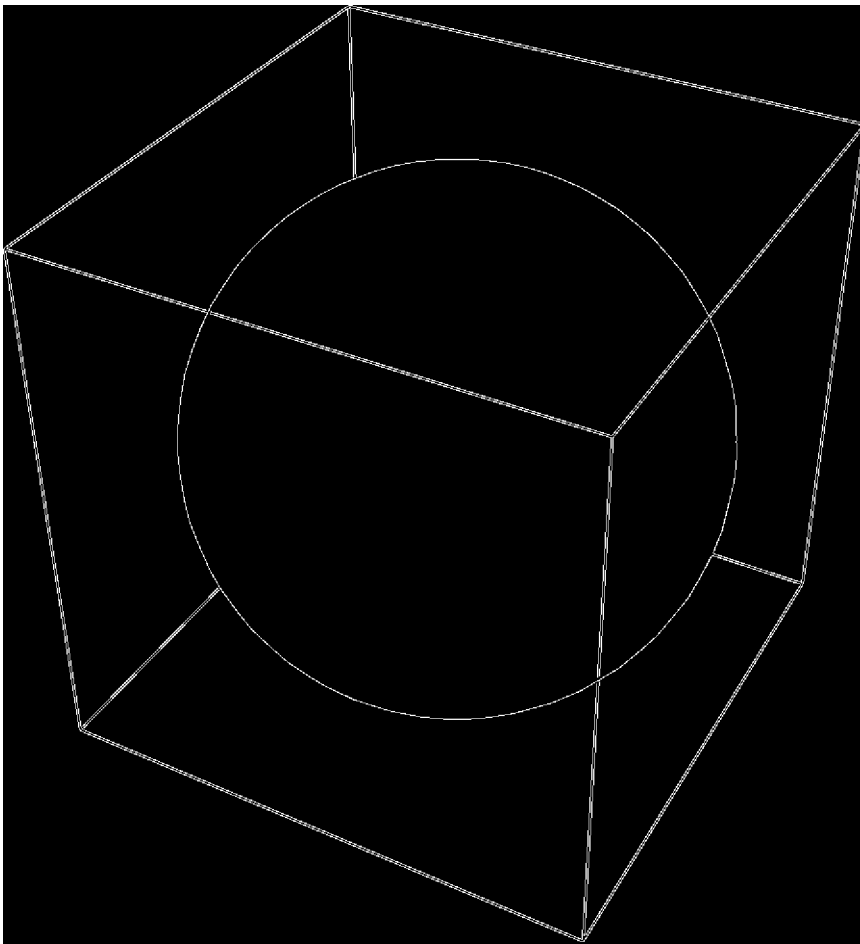
Out[214]=



In[215]:=

```
EdgeDetect[Graphics3D[Sphere[]]]
```

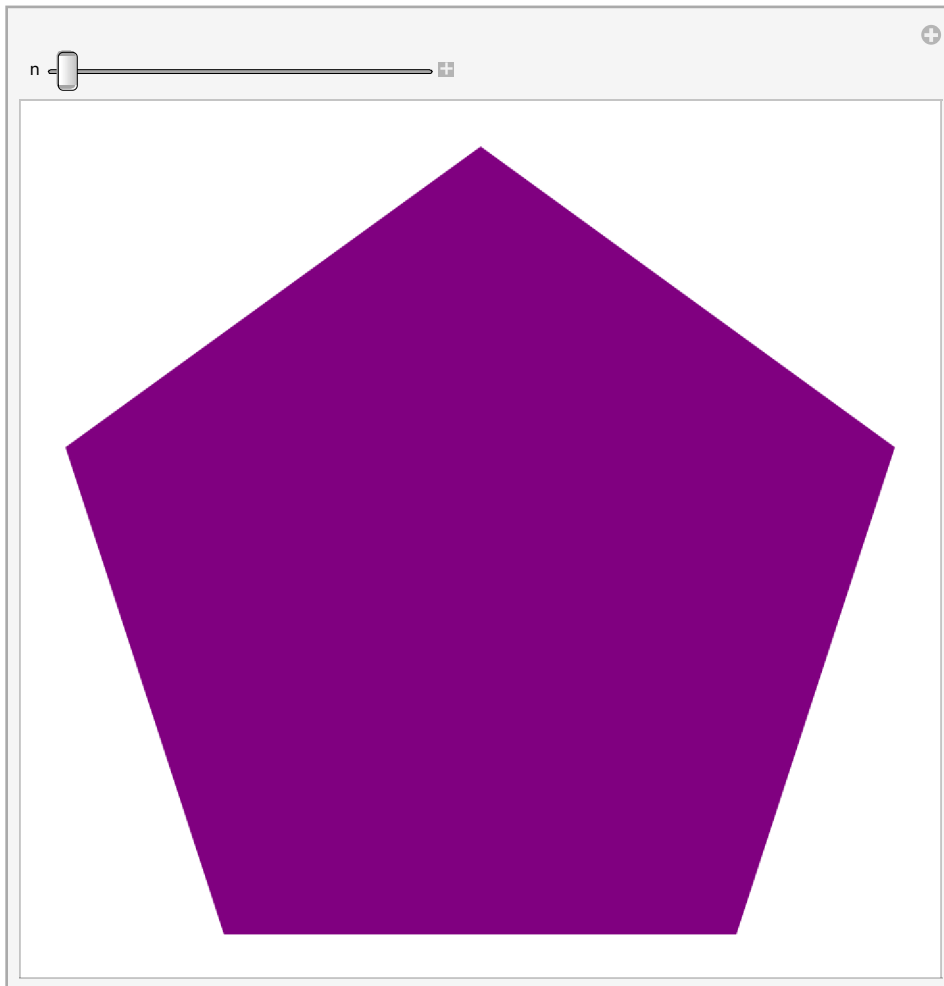
Out[215]=



In[216]:=

Manipulate[Blur[Graphics[Style[RegularPolygon[5], Purple]], n], {n, 0, 20}]

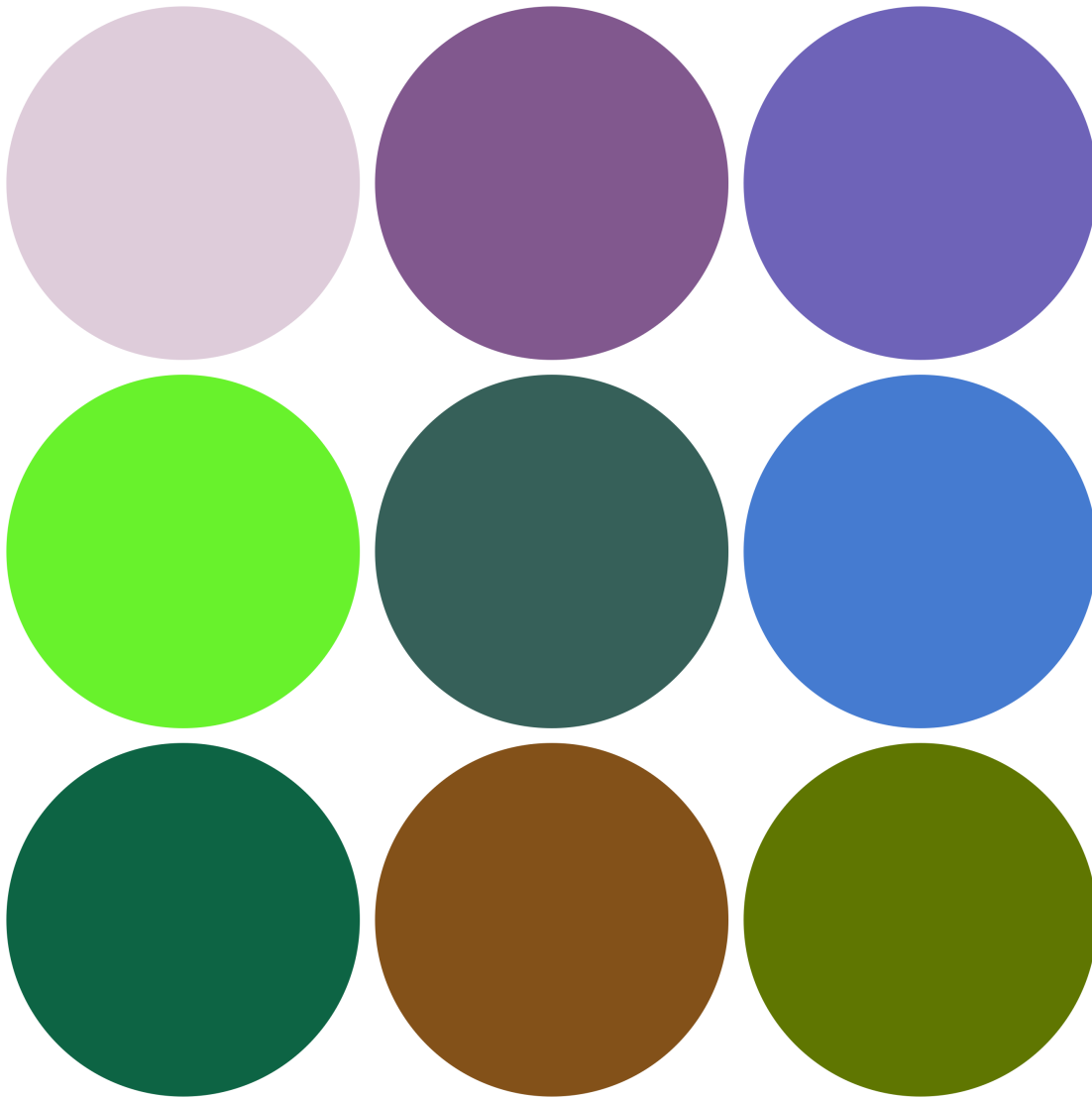
Out[216]=



In[217]:=

ImageCollage[Table[Graphics[Style[Disk[]], RandomColor[]], 9]]

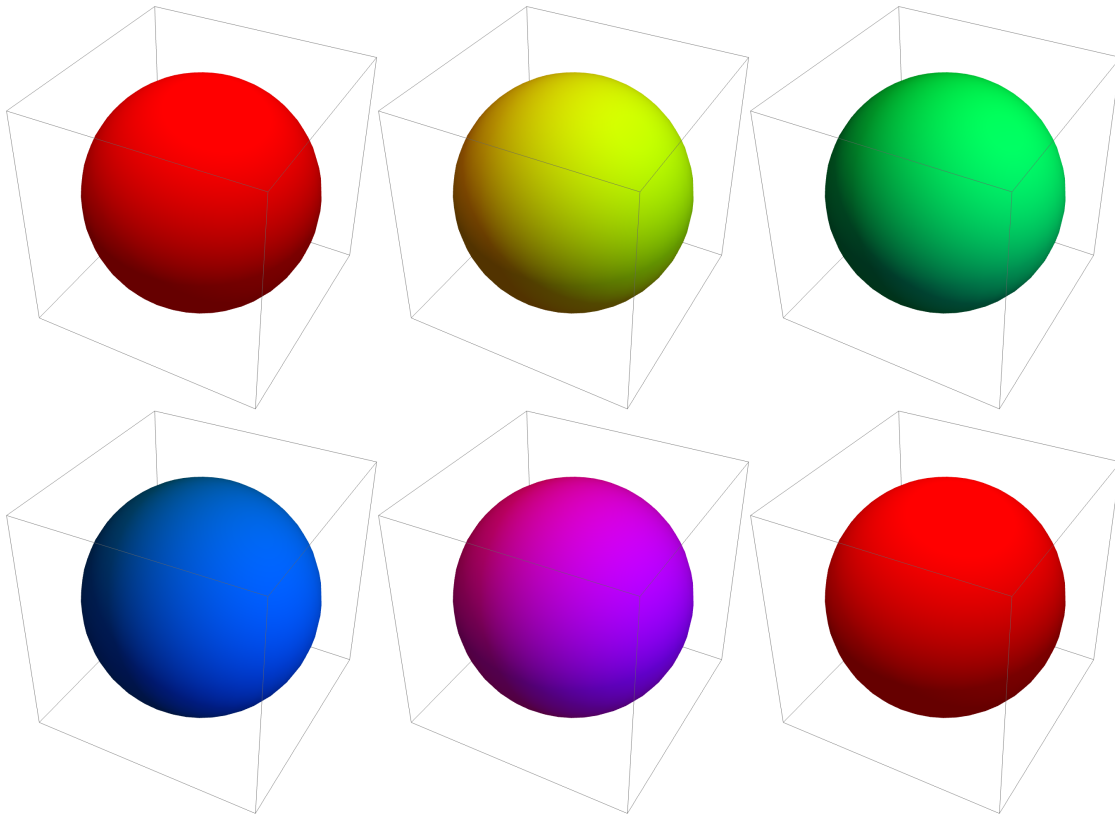
Out[217]=



In[218]:=

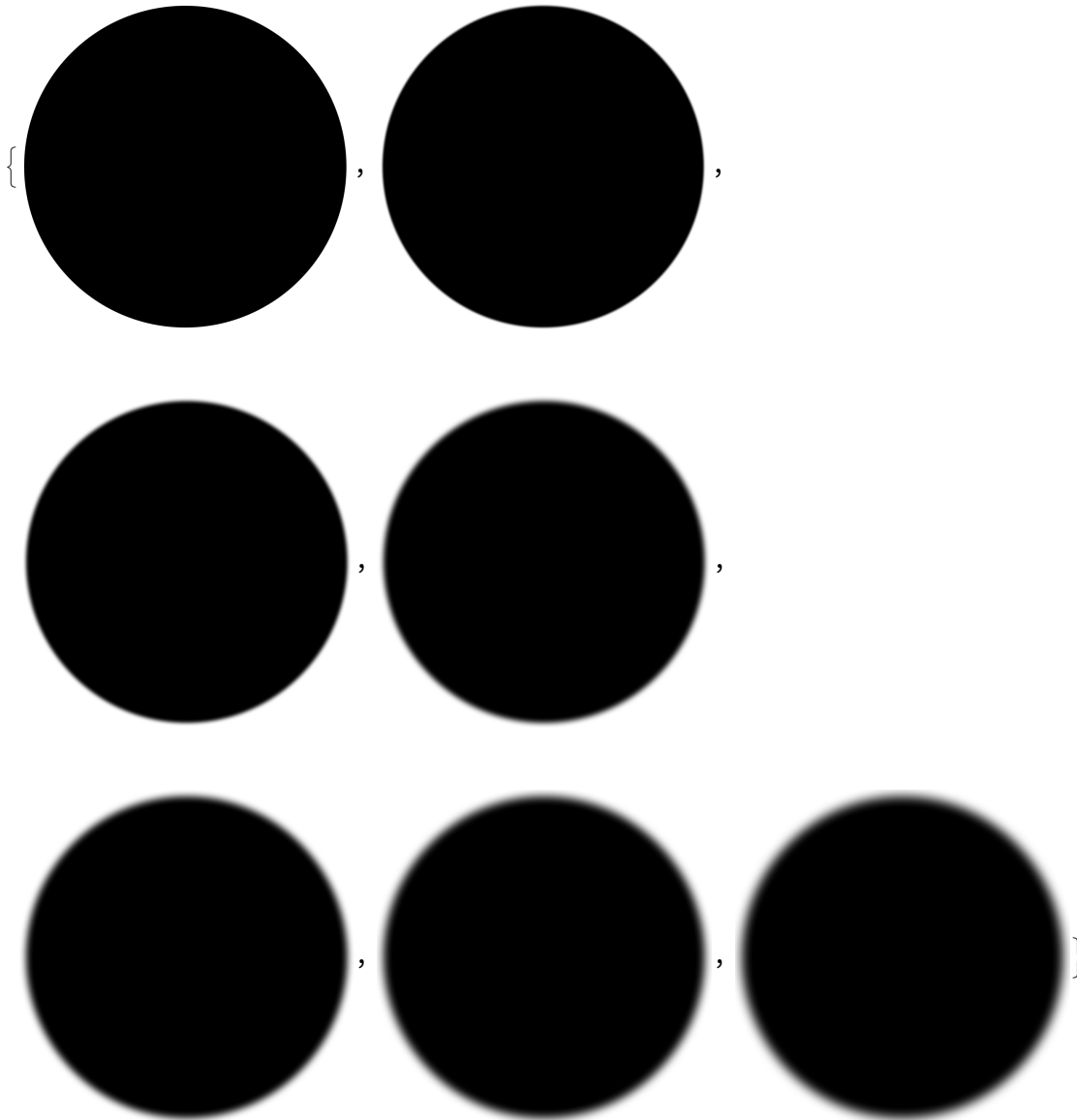
```
ImageCollage[Table[Graphics3D[Style[Sphere[], Hue[n]]], {n, 0, 1, 0.2}]]
```

Out[218]=



```
In[219]:= Table[Blur[Graphics[Disk[]], n], {n, 0, 30, 5}]
```

```
Out[219]=
```



```
In[220]:= ImageAdd[, Graphics[Disk[]]]
```

```
Out[220]=
```



```
In[221]:= ImageAdd[, Graphics[Style[RegularPolygon[8], Red]]]
```

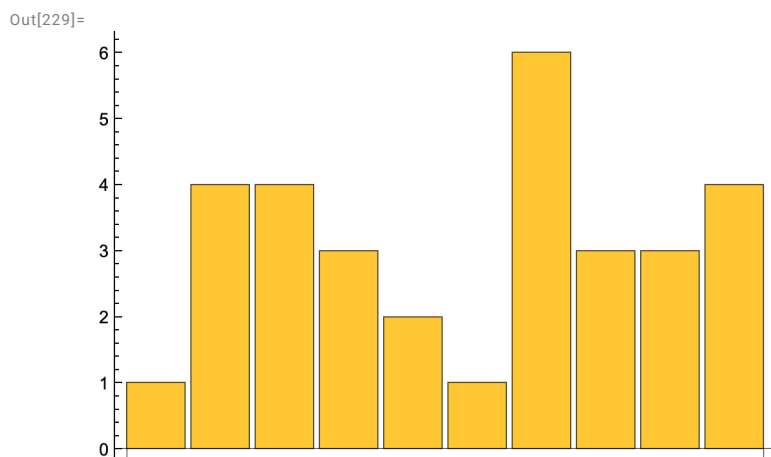
```
Out[221]=
```




```
In[228]:= Column[Table[StringTake["this is about strings", n],
  {n, StringLength["this is about strings"]}]]
```

```
Out[228]=
t
th
thi
this
this
this i
this is
this is
this is a
this is ab
this is abo
this is abou
this is about
this is about
this is about s
this is about st
this is about str
this is about stri
this is about strin
this is about string
this is about strings
```

```
In[229]:= BarChart[StringLength[TextWords["A long time ago, in a galaxy far, far away"]]]
```



```
In[230]:= StringLength[WikipediaData["computer"]]
```

```
Out[230]=
60 266
```

```
In[231]:= Length[TextWords[WikipediaData["computer"]]]
```

```
Out[231]=
9271
```

In[232]:=

Take[TextSentences[WikipediaData["strings"]], 1]

Out[232]=

{String or strings may refer to:}

In[233]:=

StringJoin[StringTake[TextSentences[WikipediaData["computers"]], 1]]

Out[233]=

AMTTACCESEMTTTCTPP=ITTDDBTTTT==DTLTTTSITIIDMTTAAATTTIASIBIAITITIITSI=CCAHTFTTTAEBNH
 =ITax()2{,THI=DHTTTTAB==CBTDETTITIRTZTT=PTEITDTTHACIINCTLOTIIHBT==TTHTVTE=
 ECWATIHJTIIAATBAIL=TJFCJTHATHTTWITT=TTDTKIHKNHPNIMTGFTTWISTITS=TTLTTTT=C=A=SH=
 TC==ATIET=WTTSC=TSC=TCATRDITPIWJSAIT=TES=TTSHTALTSG=
 AETTLSEIETWOAMTTTRACrRIISFIIG=IDOHCIAMA=WTOBItSTBSIT=SMSTSS=SSCICW=T=TTMIAL=
 TITHTFMPWSTCBOTOI=ITTSTTITMWITC=PUTTS=MF=ATHHIT=PALTP=ETH0BSA=CTITTITCITA"=AWA=
 TMH=TQCVSLTTT=ACARPE=AT=====M

In[234]:=

Last[Sort[StringLength[WordList[]]]]

Out[234]=

23

In[235]:=

Count[StringTake[WordList[], 1], "q"]

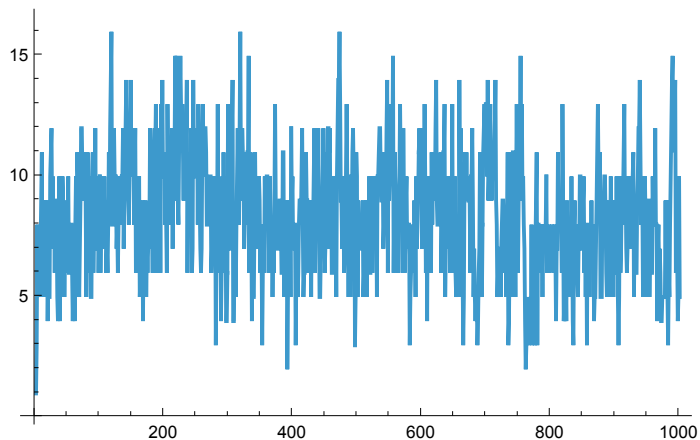
Out[235]=

194

In[236]:=

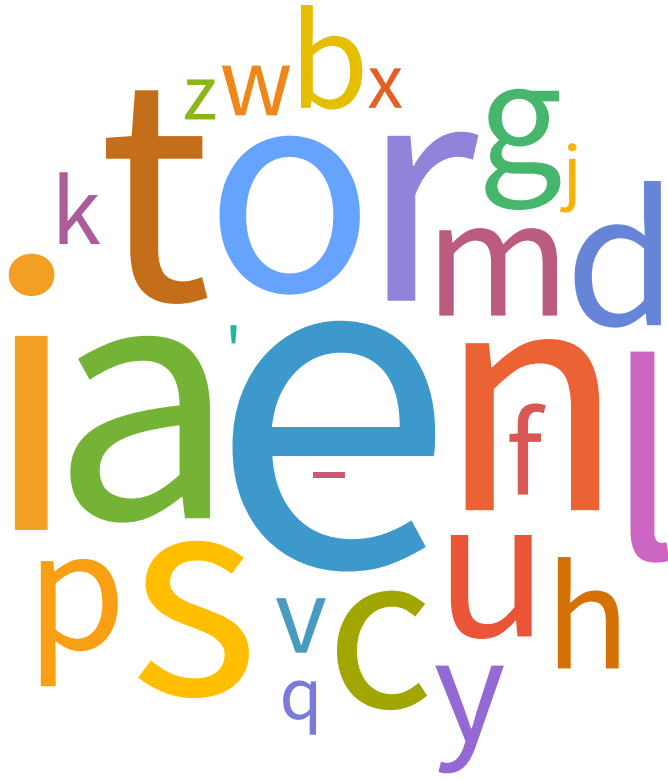
ListLinePlot[StringLength[Take[WordList[], 1000]]]

Out[236]=




```
In[237]:= WordCloud[Characters[StringJoin[WordList[]]]]
```

```
Out[237]=
```



```
In[238]:=
```

```
In[239]:=
```