# Jeremy — 2025-01-17 — PS 1

```
1 + 2 + 3
Out[120]=
In[121]:=
        1 + 2 + 3 + 4 + 5
Out[121]=
        15
In[122]:=
        1 * 2 * 3 * 4 * 5
Out[122]=
        120
In[123]:=
        5 ^ 2
Out[123]=
        25
In[124]:=
        3 ^ 4
Out[124]=
        81
In[125]:=
        10 ^ 12
Out[125]=
        1000000000000
In[126]:=
         3^(7 * 8)
Out[126]=
        523 347 633 027 360 537 213 511 521
In[127]:=
         (4-2)*(3+4)
Out[127]=
        14
In[128]:=
        29 000 * 73
Out[128]=
        2117000
In[129]:=
        -3 + -2 + -1 + 0 + 1 + 2 + 3
Out[129]=
        0
```

In[120]:=

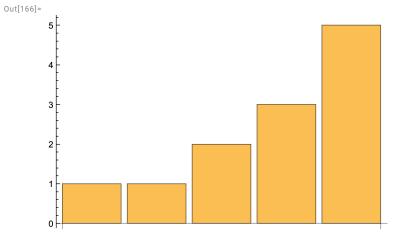
```
In[130]:=
         24/3
Out[130]=
         8
In[131]:=
         5 ^ 100
Out[131]=
         7\,888\,609\,052\,210\,118\,054\,117\,285\,652\,827\,862\,296\,732\,064\,351\,090\,230\,047\,702\,789\,306\,640\,625
In[132]:=
         100 - 5 ^ 2
Out[132]=
         75
In[133]:=
         6 * 5 ^ 2 + 7
Out[133]=
         157
In[134]:=
         3^2-2^3
Out[134]=
         1
In[135]:=
         2 ^ 3 * 3 ^ 2
Out[135]=
         72
In[136]:=
         2 * (8 - 11)
Out[136]=
         -6
In[137]:=
         Plus[7, 6, 5]
Out[137]=
         18
In[138]:=
         Times[2, Plus[3, 4]]
Out[138]=
         14
In[139]:=
         Max[6*8, 5*9]
Out[139]=
         48
In[140]:=
         RandomInteger[1000]
Out[140]=
         450
```

```
In[141]:=
        Plus[10, RandomInteger[10]]
Out[141]=
        13
In[142]:=
        Times[5, 4, 3, 2]
Out[142]=
        120
In[143]:=
        Subtract[2, 3]
Out[143]=
In[144]:=
        Times[Plus[8, 7], Plus[9, 2]]
Out[144]=
        165
In[145]:=
        Divide[Subtract[26, 89], 9]
Out[145]=
        -7
In[146]:=
        Subtract[100, Power[5, 2]]
Out[146]=
        75
In[147]:=
        Max[3<sup>5</sup>, 5<sup>3</sup>]
Out[147]=
        243
In[148]:=
        3 * Max[4^3, 3^4]
Out[148]=
        243
In[149]:=
        RandomInteger[1000] + RandomInteger[1000]
Out[149]=
        650
In[150]:=
        Range [4]
Out[150]=
        {1, 2, 3, 4}
```

```
In[151]:=
       Range [100]
Out[151]=
       \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22,
        23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,
        43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,
        63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81,
        82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100}
In[152]:=
       Reverse[Range[4]]
Out[152]=
       {4, 3, 2, 1}
In[153]:=
       Reverse[Range[50]]
Out[153]=
       {50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37,
        36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20,
        19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1}
In[154]:=
       Join[Range[4], Reverse[Range[4]]]
Out[154]=
       \{1, 2, 3, 4, 4, 3, 2, 1\}
In[155]:=
       ListPlot[Join[Range[100], Reverse[Range[100]]]]
Out[155]=
       100
        80
        60
        40
        20
                                  100
                                                            200
                                               150
In[156]:=
       Range[RandomInteger[10]]
Out[156]=
       \{1, 2, 3, 4, 5\}
In[157]:=
       Range [10]
Out[157]=
       \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}
```

```
In[158]:=
      Range [5]
Out[158]=
       \{1, 2, 3, 4, 5\}
In[159]:=
      Join[Range[10], Range[10], Range[5]]
Out[159]=
       \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 2, 3, 4, 5\}
In[160]:=
      Join[Range[20], Reverse[Range[20]]]
Out[160]=
       20, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1}
In[161]:=
       Reverse[Reverse[Range[4]]]
Out[161]=
       \{1, 2, 3, 4\}
In[162]:=
      Join[Range[5], Reverse[Range[4]]]
Out[162]=
       \{1, 2, 3, 4, 5, 4, 3, 2, 1\}
In[163]:=
      Join[Reverse[Range[3]], Reverse[Range[4]], Reverse[Range[5]]]
Out[163]=
       \{3, 2, 1, 4, 3, 2, 1, 5, 4, 3, 2, 1\}
In[164]:=
      Range[5] + 9
Out[164]=
       {10, 11, 12, 13, 14}
In[165]:=
      Join[Range[10], Reverse[Range[10]], Range[10]]
Out[165]=
       \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}
```

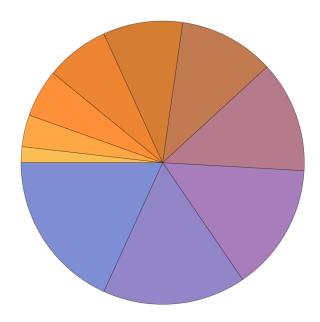
BarChart[{1, 1, 2, 3, 5}]



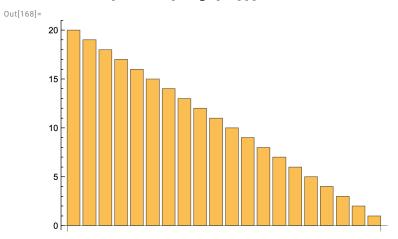
In[167]:=

PieChart[Range[10]]

Out[167]=



### In[168]:= BarChart[Reverse[Range[20]]]



In[169]:=

## Column[Range[5]]

Out[169]=

1 2 3

4

#### In[170]:=

## NumberLinePlot[Range[5]^2]

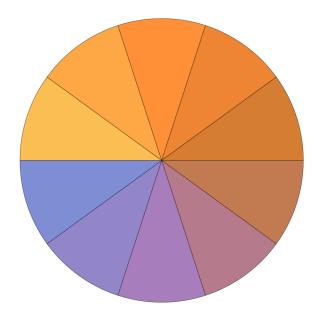
Out[170]=



In[171]:=

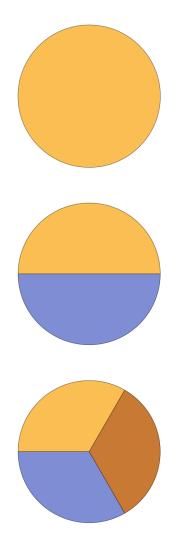
 $\texttt{PieChart}[\{1,\,1,\,1,\,1,\,1,\,1,\,1,\,1,\,1\}]$ 

Out[171]=

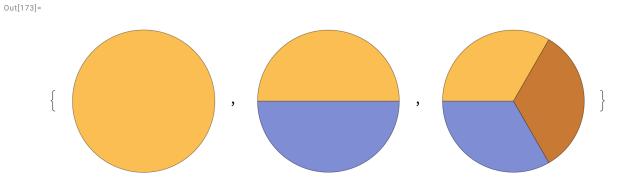


### In[172]:= $\texttt{Column[\{PieChart[\{1\}], PieChart[\{1, 1\}], PieChart[\{1, 1, 1\}]\}]}$

Out[172]=

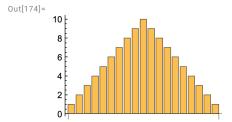


In[173]:=  $\{ \texttt{PieChart}[\{1\}] \,,\, \texttt{PieChart}[\{1,\,1\}] \,,\, \texttt{PieChart}[\{1,\,1,\,1\}] \}$ 



#### In[174]:=

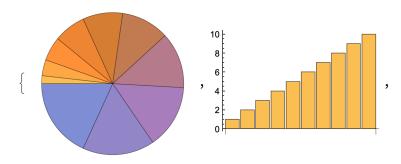
### BarChart[Join[Range[10], Reverse[Range[9]]]]



In[175]:=

### {PieChart[Range[10]], BarChart[Range[10]], LinePlot[Range[10]]}

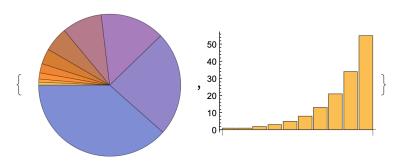
Out[175]=



LinePlot[{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}]

In[176]:=

Out[176]=



In[177]:=

### Column[{NumberLinePlot[Range[5]], NumberLinePlot[Range[5]]}]

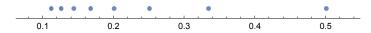
Out[177]=

	. •	. •	•	•
1				
	. •	•	•	<del>.</del>
1				

In[178]:=

NumberLinePlot[ $\{1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, 1/9\}$ ]

Out[178]=



In[179]:=

In[180]:=

In[181]:=

In[182]:=