In [1]:
```
import pandas as pd
```

In [2]:
```
df = pd.read_csv("C:/Users/jain/Desktop/Goerli_FinalityTime.csv")
df.head()
```

Out[2]:

	Transaction Hash	Time Taken
0	0x0a8042f055ad2b9d9188590407d498257c04151aeb51...	23
1	0x3043d980b67e600232e1be1cbb63fcde43ecdc1e67cd...	25
2	0x52e9ebac2cd51a17ea3f881352724393a8d7f1f67df5...	37
3	0x999c84d08e7d07ee9aa0d0ac3c168c6a5612abdf2d0a...	23
4	0xc295b06e24993af0478aa15534eac2426c4f416b8426...	19

In [3]:
```
df.shape
```

Out[3]:
```
(181, 2)
```

In [4]:
```
df.describe()
```

Out[4]:

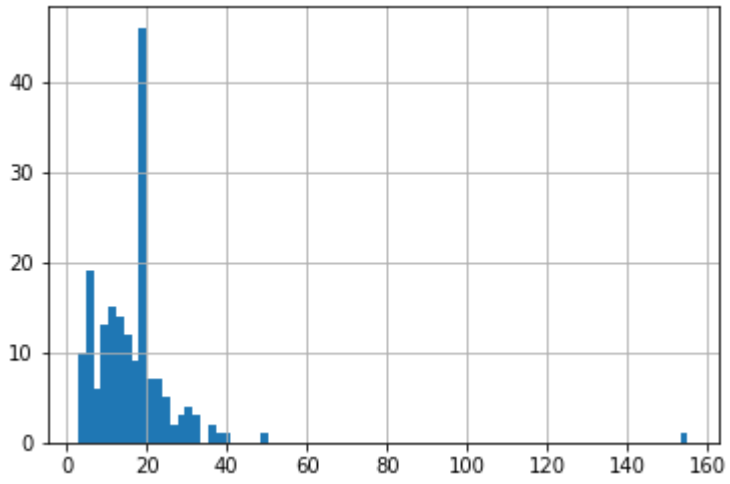
	Time Taken
count	181.000000
mean	16.801105
std	13.131988
min	3.000000
25%	10.000000
50%	17.000000
75%	20.000000
max	155.000000

In [74]:
```
count = df['Time Taken'].value_counts(sort=False)
print(count)
```

```
3       5
4       5
5       6
6      13
7       3
8       3
9       9
10      4
11     10
12      5
13      9
14      5
15      6
16      6
17      6
18      3
19     27
20     19
21      7
22      3
23      4
24      3
25      2
27      2
28      3
30      3
31      1
32      2
33      1
36      1
37      1
39      1
40      1
50      1
155     1
Name: Time Taken, dtype: int64
```

In [71]:
```
import matplotlib.pyplot as plt
df['Time Taken'].hist(bins=80)
```

Out[71]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x1ebaeba2860>
```

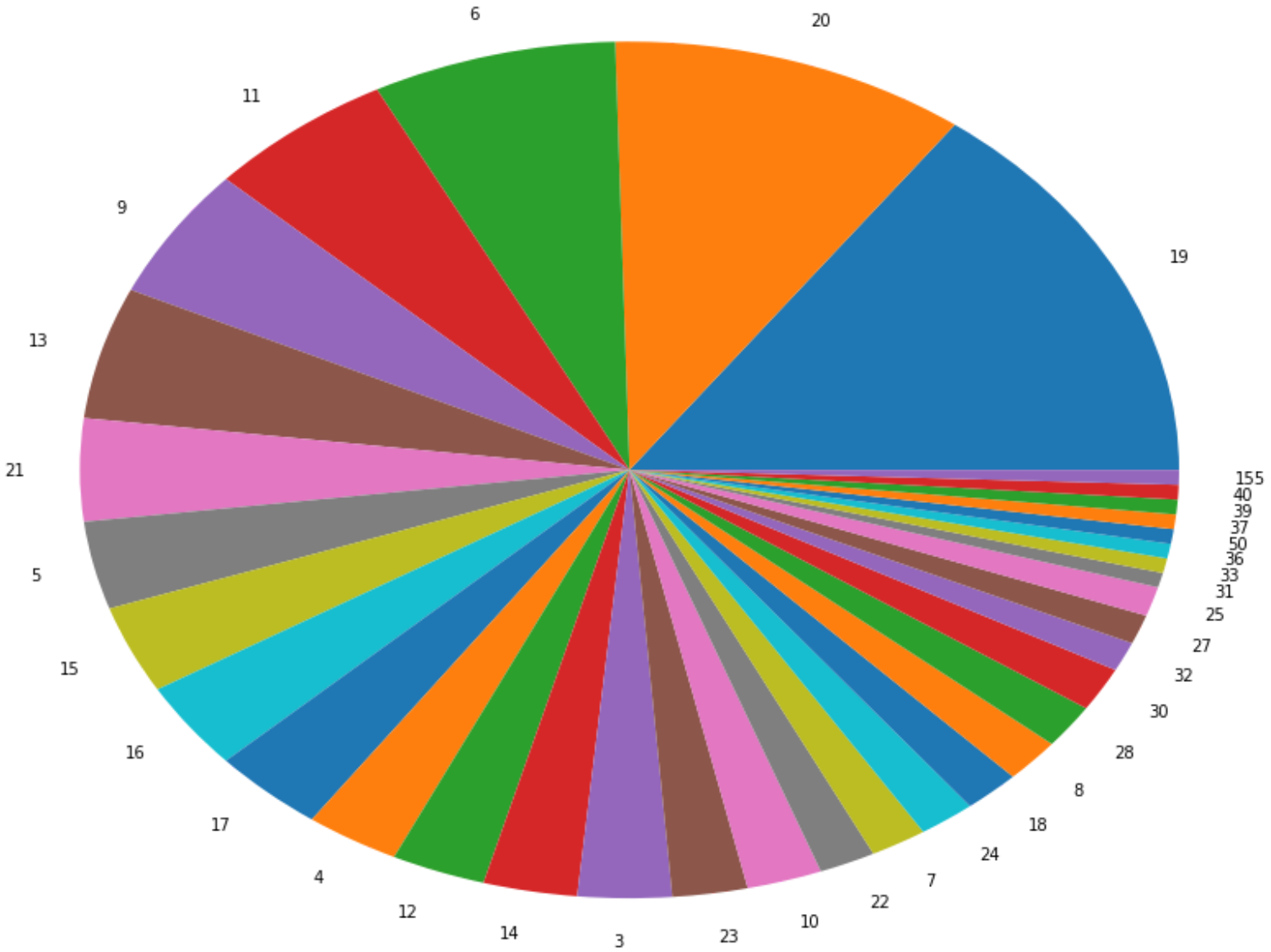


In [7]:
```
import statistics
```

In [8]:
```
statistics.stdev(df['Time Taken'])
```

Out[8]:
```
13.131988040025167
```

In [72]:
```
import matplotlib.pyplot as plt
fig = plt.figure(figsize =(15, 12))
plt.title('Numbers representing time in seconds taken by transaction.')
plt.pie(count.values, labels = count.index)
plt.show()
```


6
20
11
9
19
13
21
155
40
39
37
50
36
33
31
5
25
27
15
32
30
16
28
8
17
18
24
4
7
12
22
14
10
3
23

As per the analysis from above data, we inferred that majority of transactions has a finality time of below 20 seconds. There are only 13 transactions who crosses the time of above 20 seconds out of 181 transactions.So, overall standard deviation is not high and mean value is 16.8. And hence, the finality time approximate value is 120sec. (Mean + std deviation + considerable transactions having time above 30 seconds + outliers consideration.)