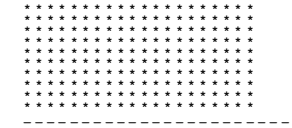
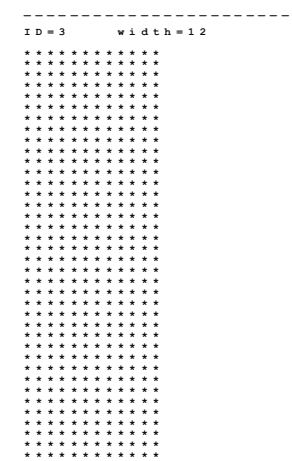
ID=1 width=20 height=10 area=200 perim=60 type= Shape/Parallelogram/Rectangle



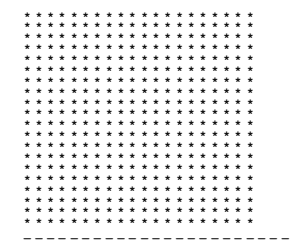
ID=2 width=2 height=2 area=4 perim=8 type= Shape/Parallelogram/Rectangle

---

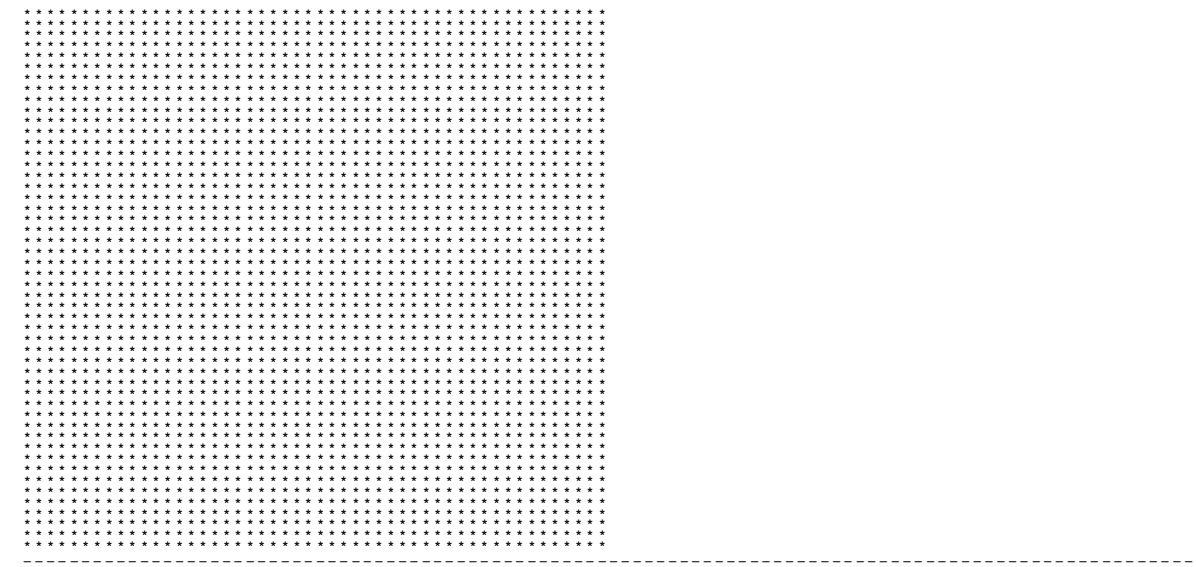
ID=3 width=12 height=38 area=456 perim=100 type= Shape/Parallelogram/Rectangle



ID=4 width=20 height=20 area=400 perim=80 type= Shape/Parallelogram/Rectangle/Square



ID=5 width=50 height=50 area=2500 perim=200 type= Shape/Parallelogram/Rectangle/Square



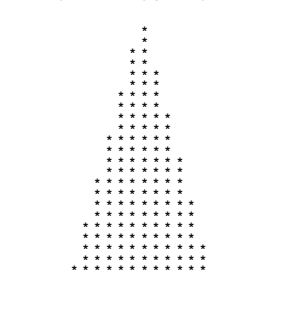
ID=6 width=2 height=2 area=4 perim=8 type= Shape/Parallelogram/Rectangle/Square

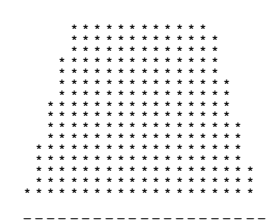
---

ID=7 width=3 height=2 area=3 perim=8 type= Shape/Triangle

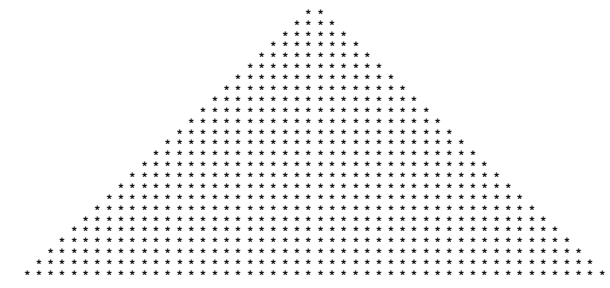
ID=8 width=3 height=2 area=3 perim=8 type= Shape/Triangle

ID=9 width=20 height=40 area=400 perim=102.462 type= Shape/Triangle

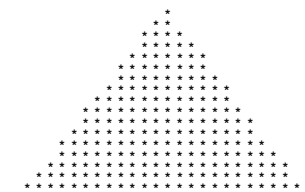




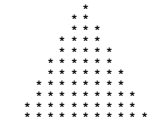
ID=10 width=50 height=25 area=625 perim=120.711 type= Shape/Triangle



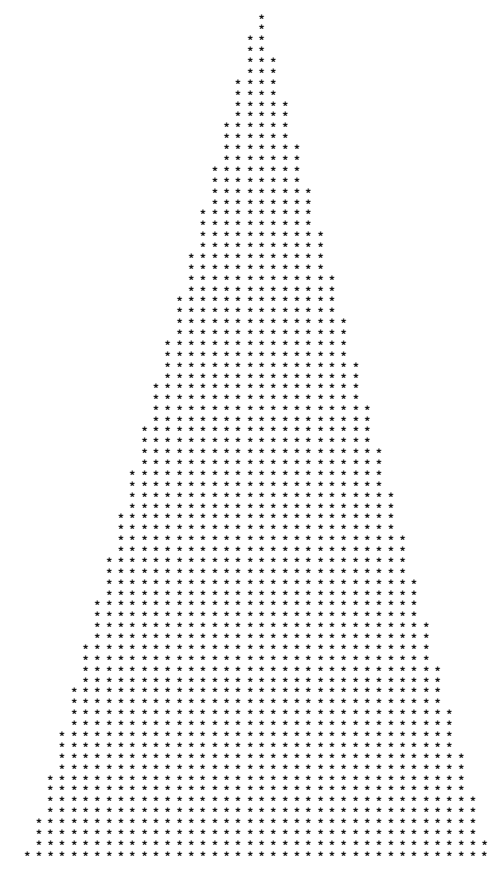
ID=11 width=24 height=17 area=204 perim=65.6173 type= Shape/Triangle



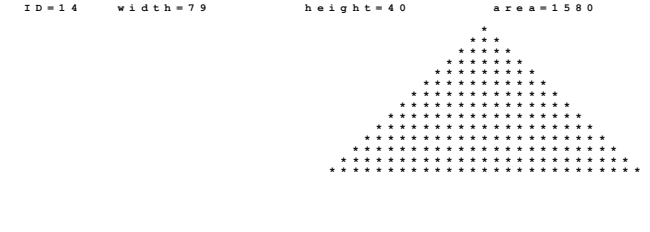
ID=12 width=11 height=11 area=60.5 perim=35.5967 type= Shape/Triangle

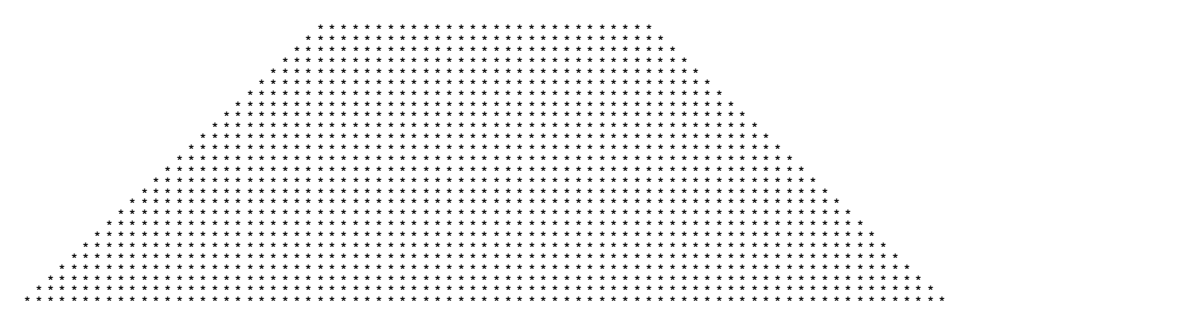


ID=13 width=40 height=79 area=1580 perim=202.985 type= Shape/Triangle

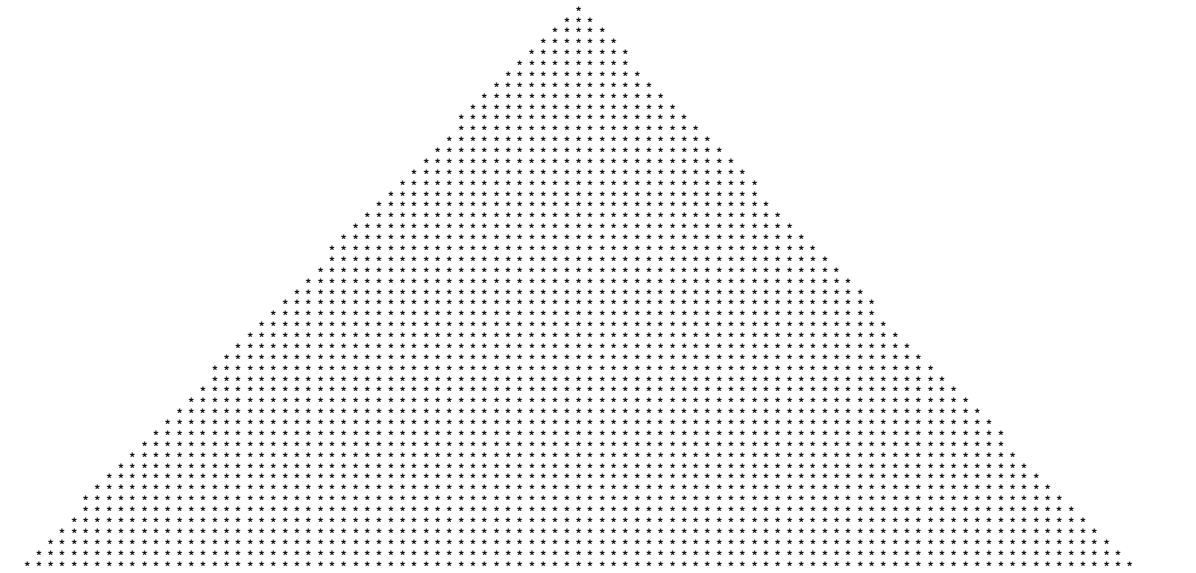


ID=14 width=79 height=40 area=1580 perim=191.432 type= Shape/Triangle

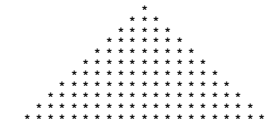




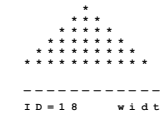
ID=15 width=95 height=52 area=2470 perim=235.858 type= Shape/Triangle



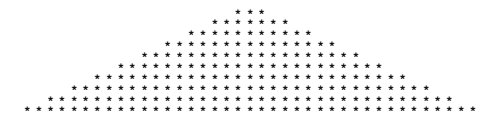
ID=16 width=21 height=11 area=115.5 perim=51.4138 type= Shape/Triangle



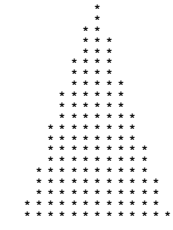
ID=17 width=11 height=6 area=33 perim=27.2788 type= Shape/Triangle



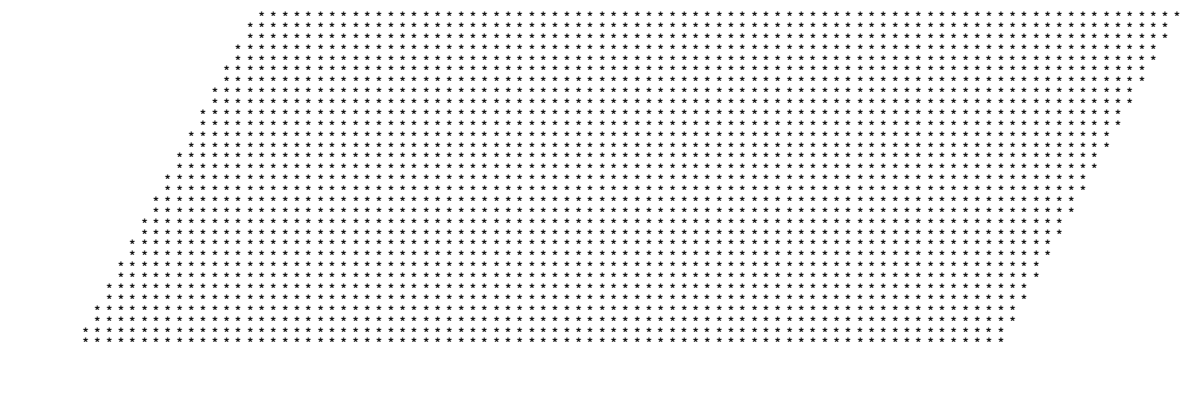
ID=18 width=39 height=10 area=195 perim=82.8292 type= Shape/Triangle

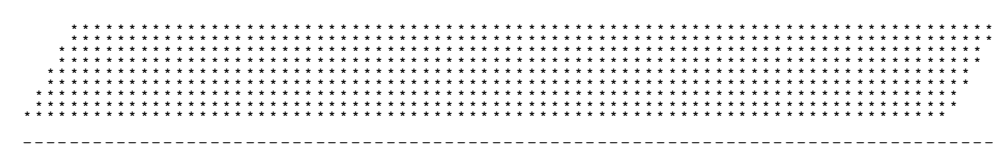


ID=19 width=13 height=21 area=136.5 perim=56.9659 type= Shape/Triangle

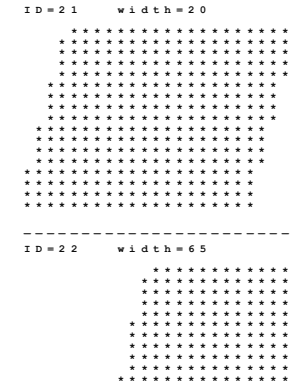


ID=20 width=79 height=40 area=3160 perim=247.443 type= Shape/Parallelogram

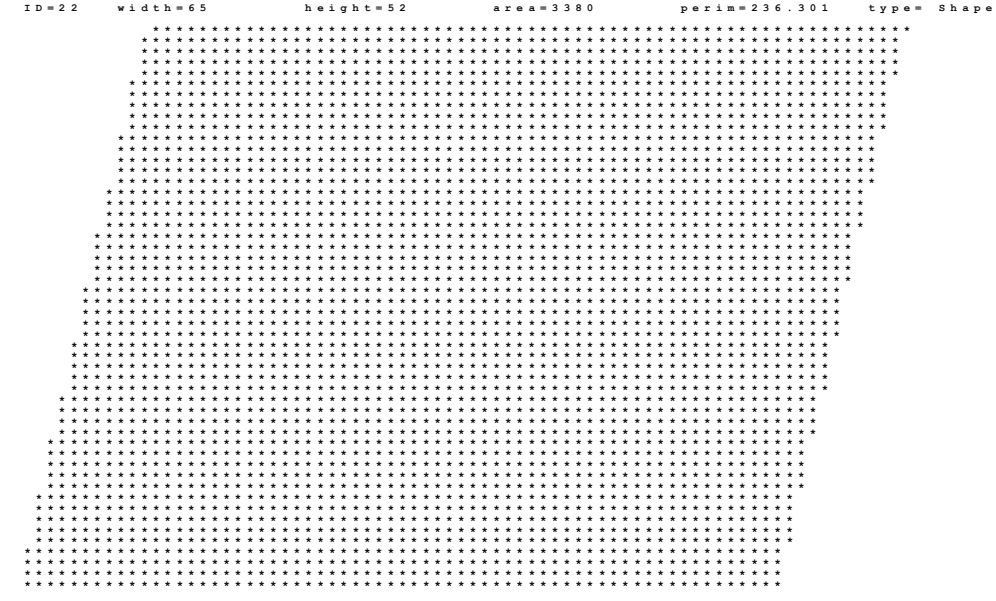




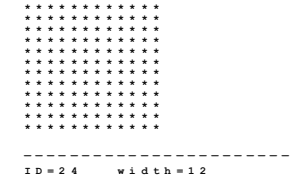
ID=21 width=20 height=17 area=340 perim=74.9285 type= Shape/Parallelogram



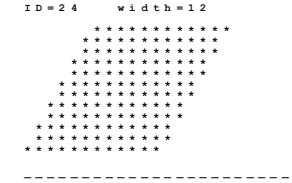
ID=22 width=65 height=52 area=3380 perim=236.301 type= Shape/Parallelogram



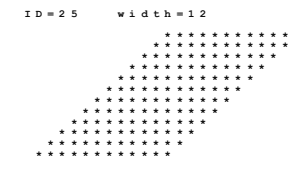
ID=23 width=12 height=12 area=144 perim=48 type= Shape/Parallelogram



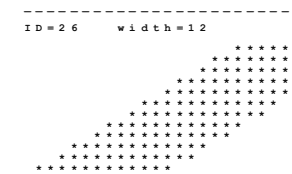
ID=24 width=12 height=12 area=144 perim=50.8328 type= Shape/Parallelogram



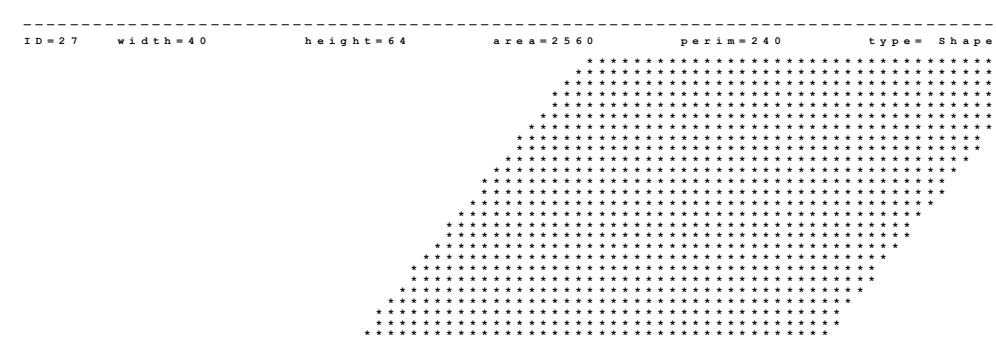
ID=25 width=12 height=12 area=144 perim=57.9411 type= Shape/Parallelogram

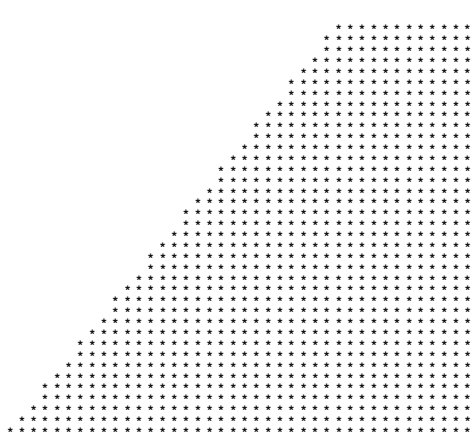


ID=26 width=12 height=12 area=144 perim=67.2666 type= Shape/Parallelogram

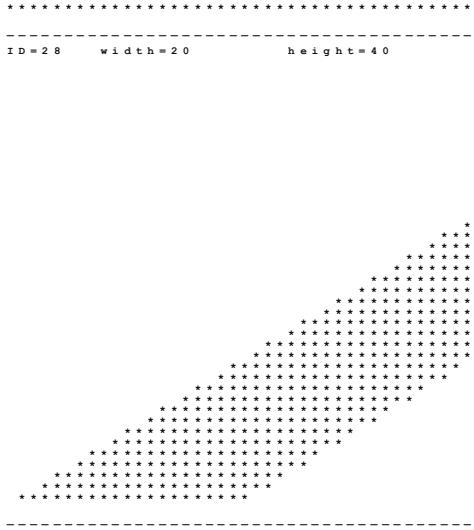


ID=27 width=40 height=64 area=2560 perim=240 type= Shape/Parallelogram





```
ID=28    width=20          height=40         area=800          perim=184.222    type= Shape/Parallelogram
```



```
ID=29    width=2 height=2          area=4   perim=8 type= Shape/Parallelogram
```

```
**
**
```

```
Here are four default shapes.

ID=30    width=2 height=2          area=4   perim=8 type= Shape/Parallelogram
```

```
**
**
```

```
ID=31    width=2 height=2          area=4   perim=8 type= Shape/Parallelogram/Rectangle
```

```
**
**
```

```
ID=32    width=2 height=2          area=4   perim=8 type= Shape/Parallelogram/Rectangle/Square
```

```
**
**
```

```
ID=33    width=3 height=2          area=3   perim=8 type= Shape/Triangle
```

```
 *
***
```

```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 0
What is the new width? 5

ID=30    width=5 height=2          area=10 perim=14          type= Shape/Parallelogram
```

```
*****
*****
```

```
What is the new height? 14

ID=30    width=5 height=14         area=70 perim=38          type= Shape/Parallelogram
```

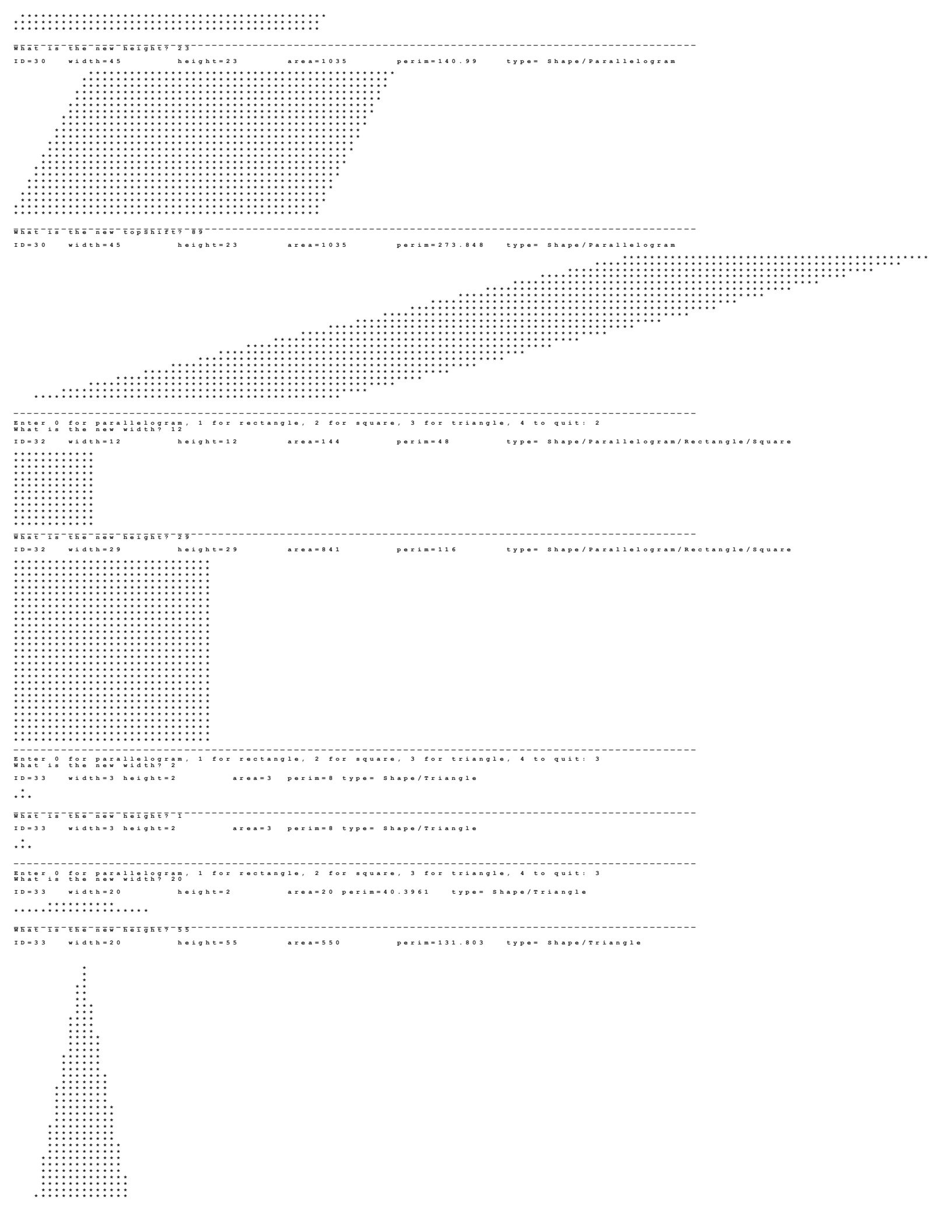
```
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
```

```
What is the new topShift? -4

ID=30    width=5 height=14         area=70 perim=38          type= Shape/Parallelogram
```

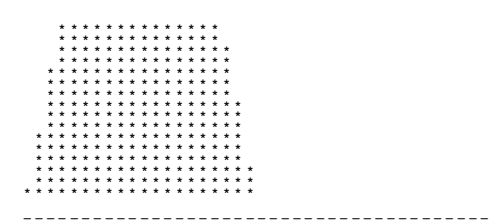
```
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
```

```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 0
What is the new width? 45

ID=30    width=45          height=14         area=630          perim=118         type= Shape/Parallelogram
```

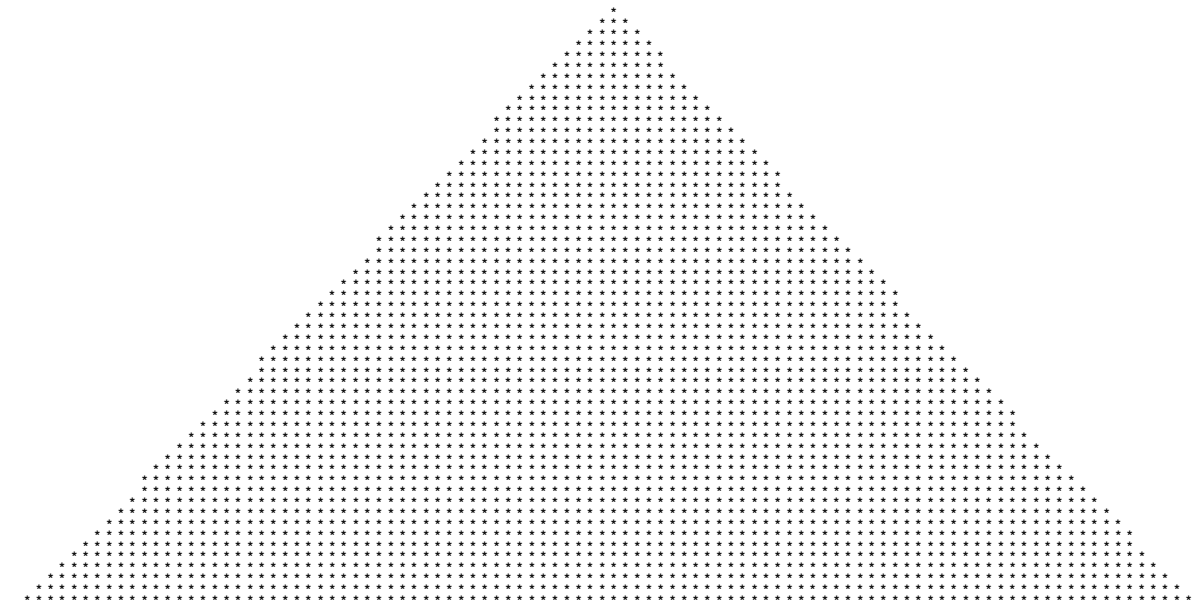
```
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
*********************************************
```



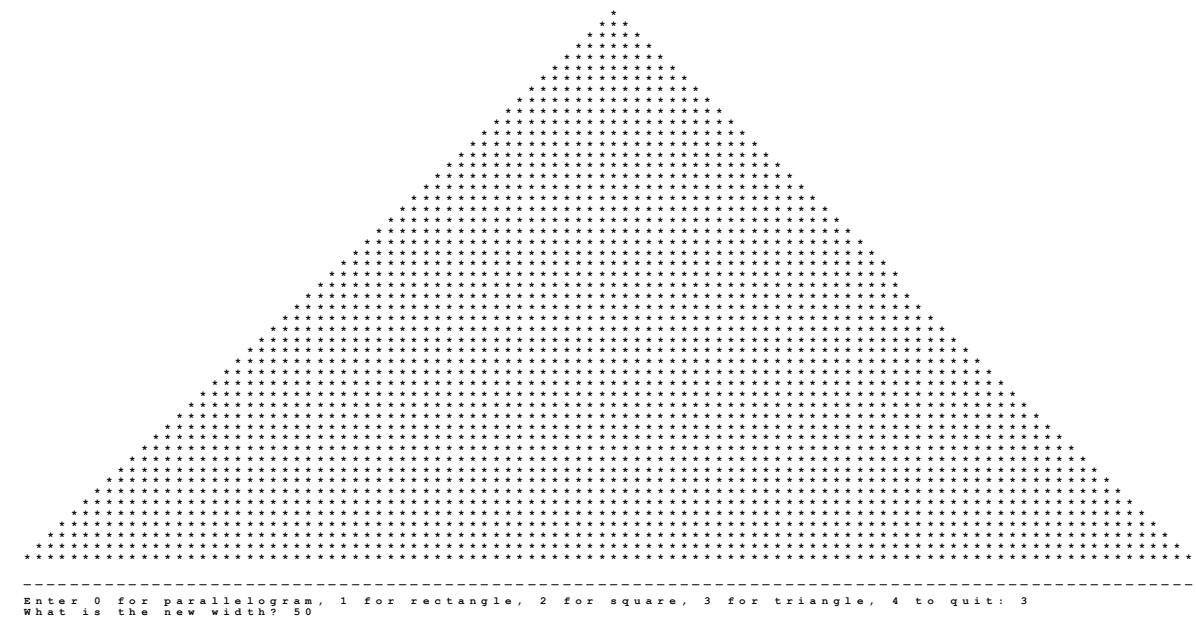
```
What is the new height? 23
ID=30    width=45          height=23         area=1035         perim=140.99     type= Shape/Parallelogram
What is the new topShift? 89
ID=30    width=45          height=23         area=1035         perim=273.848    type= Shape/Parallelogram

Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 2
What is the new width? 12
ID=32    width=12          height=12         area=144          perim=48         type= Shape/Parallelogram/Rectangle/Square

What is the new height? 29
ID=32    width=29          height=29         area=841          perim=116        type= Shape/Parallelogram/Rectangle/Square

Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 3
What is the new width? 2
ID=33    width=3 height=2          area=3   perim=8 type= Shape/Triangle

What is the new height? 1
ID=33    width=3 height=2          area=3   perim=8 type= Shape/Triangle

Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 3
What is the new width? 20
ID=33    width=20          height=2          area=20 perim=40.3961    type= Shape/Triangle

What is the new height? 55
ID=33    width=20          height=55         area=550          perim=131.803    type= Shape/Triangle
```



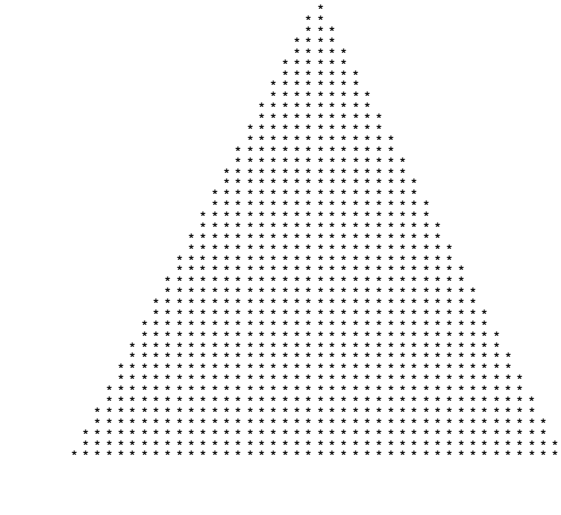
```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 3
What is the new width? 100
ID=33    width=100         height=55         area=2750         perim=248.661    type= Shape/Triangle
```

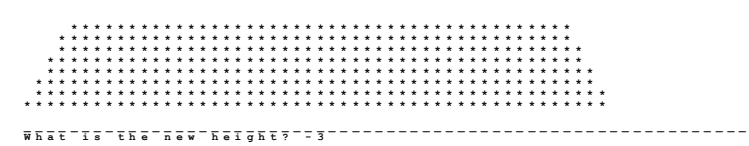


```
What is the new height? 51
ID=33    width=100         height=51         area=2550         perim=242.843    type= Shape/Triangle
```

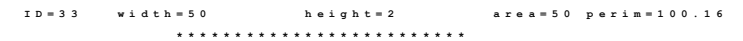


```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 3
What is the new width? 50
ID=33    width=50          height=51         area=1275         perim=163.596    type= Shape/Triangle
```

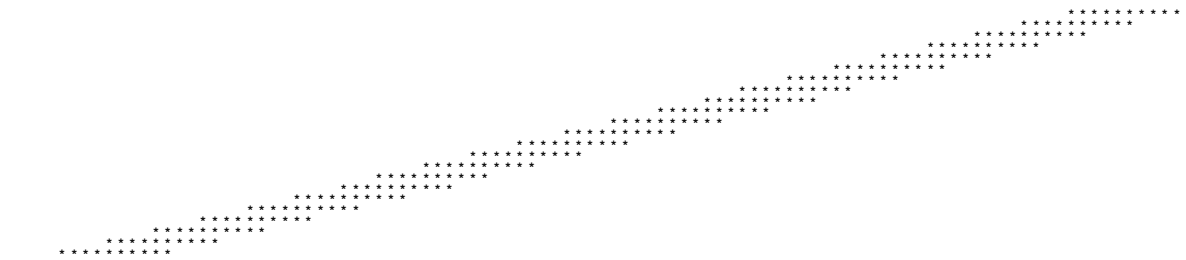




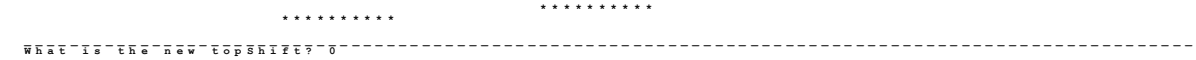
```
What Is the new height? -3
ID=33    width=50          height=2          area=50 perim=100.16     type= Shape/Triangle
```



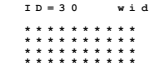
```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 0
What is the new width? 10
ID=30    width=10          height=23         area=230          perim=203.848    type= Shape/Parallelogram
```



```
What Is the new height? 4
ID=30    width=10          height=4          area=40 perim=198.18     type= Shape/Parallelogram
```



```
What Is the new topShift? 0
ID=30    width=10          height=4          area=40 perim=28         type= Shape/Parallelogram
```



```
Enter 0 for parallelogram, 1 for rectangle, 2 for square, 3 for triangle, 4 to quit: 4
BYE!

C:\Users\chabo\source\repos\Inheritance1\x64\Release\Inheritance1.exe (process 7884) exited with code 0.
Press any key to close this window . . .
```