```
AAAA:
A A A 2:
A A A 3:
A A A 4:
A A A 5:
A A A 6:
A A A 7:
A A A 8:
11+1+8 *
1.0 + 1.0 = 2.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
A A A 9:
A A A 10:
AAAJ:
1 1 + 1 11 + *
1.0 + 1.0 = 2.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
AAAQ:
1 1 + 1 12 * *
1.0 + 1.0 = 2.0, 1.0 * 12.0 = 12.0, 2.0 * 12.0 = 24.0
AAAK:
1 1 + 13 1 - *
1.0 + 1.0 = 2.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
A A 2 2:
A A 2 3:
A A 2 4:
A A 2 5:
A A 2 6:
11+2+6 *
1.0 + 1.0 = 2.0, 2.0 + 2.0 = 4.0, 4.0 * 6.0 = 24.0
A A 2 7:
12+17+
1.0 + 2.0 = 3.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
A A 2 8:
112+8 * *
1.0 + 2.0 = 3.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A A 2 9:
12+91-*
1.0 + 2.0 = 3.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
A A 2 10:
1 1 + 2 10 + *
1.0 + 1.0 = 2.0, 2.0 + 10.0 = 12.0, 2.0 * 12.0 = 24.0
A A 2 1:
1 1 + 2 11 * +
1.0 + 1.0 = 2.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
A A 2 0:
1 1 - 2 + 12 *
1.0 - 1.0 = 0.0, 0.0 + 2.0 = 2.0, 2.0 * 12.0 = 24.0
A A 2 K:
1 1 + 13 * 2 -
1.0 + 1.0 = 2.0, 2.0 * 13.0 = 26.0, 26.0 - 2.0 = 24.0
A A 3 3:
A A 3 4:
1 1 + 3 4 * *
1.0 + 1.0 = 2.0, 3.0 * 4.0 = 12.0, 2.0 * 12.0 = 24.0
A A 3 5:
1 3 + 1 5 + *
1.0 + 3.0 = 4.0, 1.0 + 5.0 = 6.0, 4.0 * 6.0 = 24.0
A A 3 6:
1 1 3 + 6 * *
1.0 + 3.0 = 4.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A A 3 7:
117+3*
1.0 + 7.0 = 8.0, 8.0 * 3.0 = 24.0, 1.0 * 24.0 = 24.0
A A 3 8:
11-3+8 *
1.0 - 1.0 = 0.0, 0.0 + 3.0 = 3.0, 3.0 * 8.0 = 24.0
A A 3 9:
11+39+*
1.0 + 1.0 = 2.0, 3.0 + 9.0 = 12.0, 2.0 * 12.0 = 24.0
A A 3 10:
3 10 1 1 + - *
1.0 + 1.0 = 2.0, 10.0 - 2.0 = 8.0, 3.0 * 8.0 = 24.0
A A 3 J:
1 11 + 3 1 - *
1.0 + 11.0 = 12.0, 3.0 - 1.0 = 2.0, 12.0 * 2.0 = 24.0
A A 3 0:
1 3 1 - 12 * *
3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A A 3 K:
1 3 - 1 13 - *
1.0 - 3.0 = -2.0, 1.0 - 13.0 = -12.0, -2.0 * -12.0 = 24.0
A A 4 4:
11+4+4*
1.0 + 1.0 = 2.0, 2.0 + 4.0 = 6.0, 6.0 * 4.0 = 24.0
A A 4 5:
1 1 5 + 4 * *
1.0 + 5.0 = 6.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A A 4 6:
11-4+6 *
```

```
1.0 - 1.0 = 0.0, 0.0 + 4.0 = 4.0, 4.0 * 6.0 = 24.0
A A 4 7:
1471-**
7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A A 4 8:
11+48+*
1.0 + 1.0 = 2.0, 4.0 + 8.0 = 12.0, 2.0 * 12.0 = 24.0
A A 4 9:
14-19-*
1.0 - 4.0 = -3.0, 1.0 - 9.0 = -8.0, -3.0 * -8.0 = 24.0
A A 4 10:
1 1 + 10 * 4 +
1.0 + 1.0 = 2.0, 2.0 * 10.0 = 20.0, 20.0 + 4.0 = 24.0
A A 4 J:
A A 4 Q:
4 1 1 + - 12 *
1.0 + 1.0 = 2.0, 4.0 - 2.0 = 2.0, 2.0 * 12.0 = 24.0
A A 4 K:
A A 5 5:
15+51-*
1.0 + 5.0 = 6.0, 5.0 - 1.0 = 4.0, 6.0 * 4.0 = 24.0
A A 5 6:
151-6**
5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A A 5 7:
1 1 + 5 7 + *
1.0 + 1.0 = 2.0, 5.0 + 7.0 = 12.0, 2.0 * 12.0 = 24.0
A A 5 8:
5 1 1 + - 8 *
1.0 + 1.0 = 2.0, 5.0 - 2.0 = 3.0, 3.0 * 8.0 = 24.0
A A 5 9:
A A 5 10:
A A 5 J:
A A 5 0:
A A 5 K:
A A 6 6:
11+66+*
1.0 + 1.0 = 2.0, 6.0 + 6.0 = 12.0, 2.0 * 12.0 = 24.0
A A 6 7:
A A 6 8:
6 1 1 + / 8 *
1.0 + 1.0 = 2.0, 6.0 / 2.0 = 3.0, 3.0 * 8.0 = 24.0
A A 6 9:
11+9 * 6 +
1.0 + 1.0 = 2.0, 2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0
A A 6 10:
A A 6 J:
A A 6 Q:
1 1 + 6 * 12 +
1.0 + 1.0 = 2.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
A A 6 K:
A A 7 7:
A A 7 8:
A A 7 9:
A A 7 10:
1 1 + 7 * 10 +
1.0 + 1.0 = 2.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
A A 7 J:
A A 7 Q:
A A 7 K:
A A 8 8:
11+8 * 8 +
1.0 + 1.0 = 2.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
A A 8 9:
A A 8 10:
A A 8 J:
A A 8 0:
A A 8 K:
A A 9 9:
A A 9 10:
A A 9 J:
A A 9 0:
A A 9 K:
1 1 + 9 13 + +
1.0 + 1.0 = 2.0, 9.0 + 13.0 = 22.0, 2.0 + 22.0 = 24.0
A A 10 10:
A A 10 J:
A A 10 Q:
1 1 + 10 12 + +
1.0 + 1.0 = 2.0, 10.0 + 12.0 = 22.0, 2.0 + 22.0 = 24.0
A A 10 K:
1 1 10 + 13 + *
1.0 + 10.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
AAJJ:
1 1 + 11 11 + +
1.0 + 1.0 = 2.0, 11.0 + 11.0 = 22.0, 2.0 + 22.0 = 24.0
AAJQ:
1 1 11 + 12 + *
```

```
1.0 + 11.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
AAJK:
1 1 11 13 + -
11.0 + 13.0 = 24.0, 1.0 - 24.0 = -23.0, 1.0 - -23.0 = 24.0
A A O O:
1 1 12 12 + -
12.0 + 12.0 = 24.0, 1.0 - 24.0 = -23.0, 1.0 - -23.0 = 24.0
A A 0 K:
1 12 1 - 13 + *
12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
AAKK:
13 1 1 + - 13 +
1.0 + 1.0 = 2.0, 13.0 - 2.0 = 11.0, 11.0 + 13.0 = 24.0
A 2 2 2:
A 2 2 3:
A 2 2 4:
1 2 + 2 4 * *
1.0 + 2.0 = 3.0, 2.0 * 4.0 = 8.0, 3.0 * 8.0 = 24.0
A 2 2 5:
15+22+*
1.0 + 5.0 = 6.0, 2.0 + 2.0 = 4.0, 6.0 * 4.0 = 24.0
A 2 2 6:
1 2 + 2 6 + *
1.0 + 2.0 = 3.0, 2.0 + 6.0 = 8.0, 3.0 * 8.0 = 24.0
A 2 2 7:
2 2 + 7 1 - *
2.0 + 2.0 = 4.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
A 2 2 8:
21-2+8 *
2.0 - 1.0 = 1.0, 1.0 + 2.0 = 3.0, 3.0 * 8.0 = 24.0
A 2 2 9:
1 2 + 9 + 2 *
1.0 + 2.0 = 3.0, 3.0 + 9.0 = 12.0, 12.0 * 2.0 = 24.0
A 2 2 10:
1 2 2 10 + * *
2.0 + 10.0 = 12.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 2 J:
1 2 2 11 * + *
2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 2 Q:
1 2 2 / + 12 *
2.0 / 2.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
A 2 2 K:
1 2 - 13 + 2 *
1.0 - 2.0 = -1.0, -1.0 + 13.0 = 12.0, 12.0 * 2.0 = 24.0
A 2 3 3:
13+23 * *
1.0 + 3.0 = 4.0, 2.0 * 3.0 = 6.0, 4.0 * 6.0 = 24.0
A 2 3 4:
1 2 + 3 + 4 *
1.0 + 2.0 = 3.0, 3.0 + 3.0 = 6.0, 6.0 * 4.0 = 24.0
A 2 3 5:
12+35+*
1.0 + 2.0 = 3.0, 3.0 + 5.0 = 8.0, 3.0 * 8.0 = 24.0
A 2 3 6:
1 2 6 + 3 * *
2.0 + 6.0 = 8.0, 8.0 * 3.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 3 7:
1 2 + 3 7 * +
1.0 + 2.0 = 3.0, 3.0 * 7.0 = 21.0, 3.0 + 21.0 = 24.0
A 2 3 8:
1 3 + 8 + 2 *
1.0 + 3.0 = 4.0, 4.0 + 8.0 = 12.0, 12.0 * 2.0 = 24.0
A 2 3 9:
1239+**
3.0 + 9.0 = 12.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 3 10:
1 2 10 * 3 + +
2.0 \times 10.0 = 20.0, 20.0 + 3.0 = 23.0, 1.0 + 23.0 = 24.0
A 2 3 J:
1 2 + 11 3 - *
1.0 + 2.0 = 3.0, 11.0 - 3.0 = 8.0, 3.0 * 8.0 = 24.0
A 2 3 0:
1 2 - 3 + 12 *
1.0 - 2.0 = -1.0, -1.0 + 3.0 = 2.0, 2.0 * 12.0 = 24.0
A 2 3 K:
1 2 13 * + 3 -
2.0 * 13.0 = 26.0, 1.0 + 26.0 = 27.0, 27.0 - 3.0 = 24.0
A 2 4 4:
1 2 + 4 4 + 9
1.0 + 2.0 = 3.0, 4.0 + 4.0 = 8.0, 3.0 * 8.0 = 24.0
A 2 4 5:
2 1 - 5 + 4 *
2.0 - 1.0 = 1.0, 1.0 + 5.0 = 6.0, 6.0 * 4.0 = 24.0
A 2 4 6:
2 1 - 4 6 *
2.0 - 1.0 = 1.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 4 7:
```

```
12-7+4*
1.0 - 2.0 = -1.0, -1.0 + 7.0 = 6.0, 6.0 * 4.0 = 24.0
A 2 4 8:
1 2 4 8 + * *
4.0 + 8.0 = 12.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 4 9:
19+2 * 4 +
1.0 + 9.0 = 10.0, 10.0 * 2.0 = 20.0, 20.0 + 4.0 = 24.0
A 2 4 10:
1 2 10 * 4 + *
2.0 \times 10.0 = 20.0, 20.0 + 4.0 = 24.0, 1.0 \times 24.0 = 24.0
A 2 4 J:
1 11 + 4 2 - *
1.0 + 11.0 = 12.0, 4.0 - 2.0 = 2.0, 12.0 * 2.0 = 24.0
A 2 4 Q:
1 2 + 4 * 12 +
1.0 + 2.0 = 3.0, 3.0 * 4.0 = 12.0, 12.0 + 12.0 = 24.0
A 2 4 K:
1 13 + 2 * 4 -
1.0 + 13.0 = 14.0, 14.0 * 2.0 = 28.0, 28.0 - 4.0 = 24.0
A 2 5 5:
1 2 - 5 5 *
1.0 - 2.0 = -1.0, 5.0 * 5.0 = 25.0, -1.0 + 25.0 = 24.0
A 2 5 6:
12-5+6*
1.0 - 2.0 = -1.0, -1.0 + 5.0 = 4.0, 4.0 * 6.0 = 24.0
A 2 5 7:
1 2 5 7 + *
5.0 + 7.0 = 12.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 5 8:
15+2/8*
1.0 + 5.0 = 6.0, 6.0 / 2.0 = 3.0, 3.0 * 8.0 = 24.0
A 2 5 9:
12 + 5 * 9 +
1.0 + 2.0 = 3.0, 3.0 * 5.0 = 15.0, 15.0 + 9.0 = 24.0
A 2 5 10:
2\ 10 \times 5 + 1 -
2.0 \times 10.0 = 20.0, 20.0 + 5.0 = 25.0, 25.0 - 1.0 = 24.0
A 2 5 1:
A 2 5 0:
1 5 + 2 * 12 +
1.0 + 5.0 = 6.0, 6.0 * 2.0 = 12.0, 12.0 + 12.0 = 24.0
A 2 5 K:
1 2 5 * 13 + +
2.0 * 5.0 = 10.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
A 2 6 6:
12+6 * 6 +
1.0 + 2.0 = 3.0, 3.0 * 6.0 = 18.0, 18.0 + 6.0 = 24.0
A 2 6 7:
17+6*2/
1.0 + 7.0 = 8.0, 8.0 * 6.0 = 48.0, 48.0 / 2.0 = 24.0
A 2 6 8:
1268*//
6.0 \times 8.0 = 48.0, 2.0 / 48.0 = 0.041666666666666664, 1.0 / 0.041666666666666664 = 24.0
A 2 6 9:
1 2 9 * 6 + *
2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 6 10:
1 2 + 10 * 6 -
1.0 + 2.0 = 3.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
A 2 6 J:
1 2 6 * 11 + +
2.0 \times 6.0 = 12.0, 12.0 + 11.0 = 23.0, 1.0 + 23.0 = 24.0
A 2 6 Q:
1 2 6 * 12 + *
2.0 \times 6.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 \times 24.0 = 24.0
A 2 6 K:
2.6 \times 1 - 13 +
2.0 \times 6.0 = 12.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
A 2 7 7:
77 * 1 - 2 /
7.0 * 7.0 = 49.0, 49.0 - 1.0 = 48.0, 48.0 / 2.0 = 24.0
A 2 7 8:
1 2 8 * 7 + +
2.0 \times 8.0 = 16.0, 16.0 + 7.0 = 23.0, 1.0 + 23.0 = 24.0
A 2 7 9:
1 2 7 * 9 + +
2.0 \times 7.0 = 14.0, 14.0 + 9.0 = 23.0, 1.0 + 23.0 = 24.0
A 2 7 10:
1 2 7 * 10 + *
2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 7 J:
2 7 * 1 - 11 +
2.0 \times 7.0 = 14.0, 14.0 - 1.0 = 13.0, 13.0 + 11.0 = 24.0
A 2 7 Q:
2 7 1 - * 12 +
7.0 - 1.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
A 2 7 K:
```

```
A 2 8 8:
1 2 8 * 8 + *
2.0 \times 8.0 = 16.0, 16.0 + 8.0 = 24.0, 1.0 \times 24.0 = 24.0
A 2 8 9:
28 * 1 - 9 +
2.0 \times 8.0 = 16.0, 16.0 - 1.0 = 15.0, 15.0 + 9.0 = 24.0
A 2 8 10:
281-*10+
8.0 - 1.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
A 2 8 J:
A 2 8 0:
A 2 8 K:
1 2 + 8 13 + +
1.0 + 2.0 = 3.0, 8.0 + 13.0 = 21.0, 3.0 + 21.0 = 24.0
A 2 9 9:
A 2 9 10:
A 2 9 J:
1 2 + 11 * 9 -
1.0 + 2.0 = 3.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
A 2 9 Q:
1 2 + 9 12 + +
1.0 + 2.0 = 3.0, 9.0 + 12.0 = 21.0, 3.0 + 21.0 = 24.0
A 2 9 K:
1 2 9 + 13 + *
2.0 + 9.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 10 10:
A 2 10 J:
1 2 + 10 11 + +
1.0 + 2.0 = 3.0, 10.0 + 11.0 = 21.0, 3.0 + 21.0 = 24.0
A 2 10 Q:
1 2 10 + 12 + *
2.0 + 10.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 10 K:
2 1 10 13 + -
10.0 + 13.0 = 23.0, 1.0 - 23.0 = -22.0, 2.0 - -22.0 = 24.0
A 2 1 1:
1 2 11 + 11 + *
2.0 + 11.0 = 13.0, 13.0 + 11.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 J 0:
2 1 11 12 + - -
11.0 + 12.0 = 23.0, 1.0 - 23.0 = -22.0, 2.0 - -22.0 = 24.0
A 2 J K:
2 1 - 11 13 + *
2.0 - 1.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 2 Q Q:
1 2 + 12 * 12 -
1.0 + 2.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
A 2 Q K:
1 2 12 13 + -
12.0 + 13.0 = 25.0, 2.0 - 25.0 = -23.0, 1.0 - -23.0 = 24.0
A 2 K K:
1 13 2 - 13 + *
13.0 - 2.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 3 3:
1 3 + 3 3 + *
1.0 + 3.0 = 4.0, 3.0 + 3.0 = 6.0, 4.0 * 6.0 = 24.0
A 3 3 4:
1 3 3 + 4 * *
3.0 + 3.0 = 6.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 3 5:
1 3 3 5 + *
3.0 + 5.0 = 8.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 3 6:
16+3*3+
1.0 + 6.0 = 7.0, 7.0 * 3.0 = 21.0, 21.0 + 3.0 = 24.0
A 3 3 7:
1 3 3 7 * + *
3.0 \times 7.0 = 21.0, 3.0 + 21.0 = 24.0, 1.0 \times 24.0 = 24.0
A 3 3 8:
18+3 * 3 -
1.0 + 8.0 = 9.0, 9.0 * 3.0 = 27.0, 27.0 - 3.0 = 24.0
A 3 3 9:
13 + 93 - *
1.0 + 3.0 = 4.0, 9.0 - 3.0 = 6.0, 4.0 * 6.0 = 24.0
A 3 3 10:
1 3 - 10 + 3 *
1.0 - 3.0 = -2.0, -2.0 + 10.0 = 8.0, 8.0 * 3.0 = 24.0
A 3 3 J:
1 3 11 3 - * *
11.0 - 3.0 = 8.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 3 Q:
1 3 + 3 * 12 +
1.0 + 3.0 = 4.0, 4.0 * 3.0 = 12.0, 12.0 + 12.0 = 24.0
A 3 3 K:
A 3 4 4:
4.0 + 4.0 = 8.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 4 5:
```

```
13+45 * +
1.0 + 3.0 = 4.0, 4.0 * 5.0 = 20.0, 4.0 + 20.0 = 24.0
A 3 4 6:
6134/-/
3.0 / 4.0 = 0.75, 1.0 - 0.75 = 0.25, 6.0 / 0.25 = 24.0
A 3 4 7:
1 3 + 7 * 4 -
1.0 + 3.0 = 4.0, 4.0 * 7.0 = 28.0, 28.0 - 4.0 = 24.0
A 3 4 8:
13 + 4 * 8 +
1.0 + 3.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
A 3 4 9:
1 3 9 * + 4 -
3.0 \times 9.0 = 27.0, 1.0 + 27.0 = 28.0, 28.0 - 4.0 = 24.0
A 3 4 10:
1 3 + 10 4 - *
1.0 + 3.0 = 4.0, 10.0 - 4.0 = 6.0, 4.0 * 6.0 = 24.0
A 3 4 J:
1 3 4 * 11 + +
3.0 \times 4.0 = 12.0, 12.0 + 11.0 = 23.0, 1.0 + 23.0 = 24.0
A 3 4 Q:
1.0 - 3.0 = -2.0, -2.0 + 4.0 = 2.0, 2.0 * 12.0 = 24.0
A 3 4 K:
3 4 * 1 - 13 +
3.0 * 4.0 = 12.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
A 3 5 5:
A 3 5 6:
1 3 6 * 5 + +
3.0 \times 6.0 = 18.0, 18.0 + 5.0 = 23.0, 1.0 + 23.0 = 24.0
A 3 5 7:
15+73-*
1.0 + 5.0 = 6.0, 7.0 - 3.0 = 4.0, 6.0 * 4.0 = 24.0
A 3 5 8:
1 3 - 5 + 8 *
1.0 - 3.0 = -2.0, -2.0 + 5.0 = 3.0, 3.0 * 8.0 = 24.0
A 3 5 9:
135 * 9 + *
3.0 \times 5.0 = 15.0, 15.0 + 9.0 = 24.0, 1.0 \times 24.0 = 24.0
A 3 5 10:
35 * 1 - 10 +
3.0 \times 5.0 = 15.0, 15.0 - 1.0 = 14.0, 14.0 + 10.0 = 24.0
A 3 5 J:
1 3 + 11 5 - *
1.0 + 3.0 = 4.0, 11.0 - 5.0 = 6.0, 4.0 * 6.0 = 24.0
A 3 5 Q:
1 5 + 3 / 12 *
1.0 + 5.0 = 6.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
A 3 5 K:
1 3 13 5 - * *
13.0 - 5.0 = 8.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 6 6:
13-6+6*
1.0 - 3.0 = -2.0, -2.0 + 6.0 = 4.0, 4.0 * 6.0 = 24.0
A 3 6 7:
1673-*
7.0 - 3.0 = 4.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 6 8:
163-8**
6.0 - 3.0 = 3.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 6 9:
19+3 * 6 -
1.0 + 9.0 = 10.0, 10.0 * 3.0 = 30.0, 30.0 - 6.0 = 24.0
A 3 6 10:
1 3 10 * 6 - *
3.0 \times 10.0 = 30.0, 30.0 - 6.0 = 24.0, 1.0 \times 24.0 = 24.0
A 3 6 J:
1 11 + 6 * 3 /
1.0 + 11.0 = 12.0, 12.0 * 6.0 = 72.0, 72.0 / 3.0 = 24.0
A 3 6 0:
1 3 6 12 * / /
6.0 * 12.0 = 72.0, 3.0 / 72.0 = 0.0416666666666664, 1.0 / 0.0416666666666664 = 24.0
A 3 6 K:
1 6 - 13 + 3 *
1.0 - 6.0 = -5.0, -5.0 + 13.0 = 8.0, 8.0 * 3.0 = 24.0
A 3 7 7:
17-37-*
1.0 - 7.0 = -6.0, 3.0 - 7.0 = -4.0, -6.0 * -4.0 = 24.0
A 3 7 8:
3 1 7 8 / - /
7.0 / 8.0 = 0.875, 1.0 - 0.875 = 0.125, 3.0 / 0.125 = 24.0
A 3 7 9:
17+3/9*
A 3 7 10:
1 3 10 * + 7
3.0 \times 10.0 = 30.0, 1.0 + 30.0 = 31.0, 31.0 - 7.0 = 24.0
A 3 7 J:
```

```
A 3 7 0:
7 1 - 3 / 12 *
7.0 - 1.0 = 6.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
A 3 7 K:
1 3 + 7 13 + +
1.0 + 3.0 = 4.0, 7.0 + 13.0 = 20.0, 4.0 + 20.0 = 24.0
A 3 8 8:
1 3 + 8 * 8 -
1.0 + 3.0 = 4.0, 4.0 * 8.0 = 32.0, 32.0 - 8.0 = 24.0
A 3 8 9:
1389 * / /
8.0 \times 9.0 = 72.0, 3.0 / 72.0 = 0.0416666666666664, 1.0 / 0.04166666666666664 = 24.0
A 3 8 10:
8 3 10 1 - /
A 3 8 J:
3 11 * 8 1 + -
3.0 \times 11.0 = 33.0, 8.0 + 1.0 = 9.0, 33.0 - 9.0 = 24.0
A 3 8 Q:
1 3 + 8 12 + +
1.0 + 3.0 = 4.0, 8.0 + 12.0 = 20.0, 4.0 + 20.0 = 24.0
A 3 8 K:
1 3 8 + 13 + *
3.0 + 8.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 9 9:
9 3 9 1 - / /
9.0 - 1.0 = 8.0, 3.0 / 8.0 = 0.375, 9.0 / 0.375 = 24.0
A 3 9 10:
1 10 + 3 * 9 -
1.0 + 10.0 = 11.0, 11.0 * 3.0 = 33.0, 33.0 - 9.0 = 24.0
A 3 9 J:
1 3 + 9 11 + +
1.0 + 3.0 = 4.0, 9.0 + 11.0 = 20.0, 4.0 + 20.0 = 24.0
A 3 9 0:
1 3 9 + 12 + *
3.0 + 9.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 9 K:
3 1 9 13 + -
9.0 + 13.0 = 22.0, 1.0 - 22.0 = -21.0, 3.0 - -21.0 = 24.0
A 3 10 10:
1 3 + 10 10 + +
1.0 + 3.0 = 4.0, 10.0 + 10.0 = 20.0, 4.0 + 20.0 = 24.0
A 3 10 J:
1 3 10 + 11 + *
3.0 + 10.0 = 13.0, 13.0 + 11.0 = 24.0, 1.0 * 24.0 = 24.0
A 3 10 Q:
3 1 10 12 + - -
10.0 + 12.0 = 22.0, 1.0 - 22.0 = -21.0, 3.0 - -21.0 = 24.0
A 3 10 K:
A 3 J J:
3 1 11 11 + - -
11.0 + 11.0 = 22.0, 1.0 - 22.0 = -21.0, 3.0 - -21.0 = 24.0
A 3 J Q:
1 11 + 3 * 12 -
1.0 + 11.0 = 12.0, 12.0 * 3.0 = 36.0, 36.0 - 12.0 = 24.0
A 3 J K:
A 3 Q Q:
1 3 12 * 12 - *
3.0 \times 12.0 = 36.0, 36.0 - 12.0 = 24.0, 1.0 \times 24.0 = 24.0
A 3 Q K:
1 3 12 * + 13 -
3.0 \times 12.0 = 36.0, 1.0 + 36.0 = 37.0, 37.0 - 13.0 = 24.0
A 3 K K:
1 3 13 13 + -
13.0 + 13.0 = 26.0, 3.0 - 26.0 = -23.0, 1.0 - -23.0 = 24.0
A 4 4 4:
14+4*4+
1.0 + 4.0 = 5.0, 5.0 * 4.0 = 20.0, 20.0 + 4.0 = 24.0
A 4 4 5:
1445 * + *
4.0 \times 5.0 = 20.0, 4.0 + 20.0 = 24.0, 1.0 \times 24.0 = 24.0
A 4 4 6:
16+4*4-
1.0 + 6.0 = 7.0, 7.0 * 4.0 = 28.0, 28.0 - 4.0 = 24.0
A 4 4 7:
144 * 7 + +
4.0 * 4.0 = 16.0, 16.0 + 7.0 = 23.0, 1.0 + 23.0 = 24.0
A 4 4 8:
1 4 4 * 8 + *
4.0 \times 4.0 = 16.0, 16.0 + 8.0 = 24.0, 1.0 \times 24.0 = 24.0
A 4 4 9:
14-9+4*
1.0 - 4.0 = -3.0, -3.0 + 9.0 = 6.0, 6.0 * 4.0 = 24.0
A 4 4 10:
1 4 10 4 - * *
10.0 - 4.0 = 6.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 4 J:
4 11 4 1 + - *
```

```
4.0 + 1.0 = 5.0, 11.0 - 5.0 = 6.0, 4.0 * 6.0 = 24.0
A 4 4 Q:
1 4 - 4 12 - *
1.0 - 4.0 = -3.0, 4.0 - 12.0 = -8.0, -3.0 * -8.0 = 24.0
A 4 4 K:
A 4 5 5:
4 1 5 - 5 * -
1.0 - 5.0 = -4.0, -4.0 * 5.0 = -20.0, 4.0 - -20.0 = 24.0
A 4 5 6:
654/1-/
5.0 / 4.0 = 1.25, 1.25 - 1.0 = 0.25, 6.0 / 0.25 = 24.0
A 4 5 7:
1 4 7 * + 5 -
4.0 \times 7.0 = 28.0, 1.0 + 28.0 = 29.0, 29.0 - 5.0 = 24.0
A 4 5 8:
15+84-*
1.0 + 5.0 = 6.0, 8.0 - 4.0 = 4.0, 6.0 * 4.0 = 24.0
A 4 5 9:
4 1 - 5 * 9 +
4.0 - 1.0 = 3.0, 3.0 * 5.0 = 15.0, 15.0 + 9.0 = 24.0
A 4 5 10:
1 5 - 4 10
1.0 - 5.0 = -4.0, 4.0 - 10.0 = -6.0, -4.0 * -6.0 = 24.0
A 4 5 J:
1 4 11 5 - * *
11.0 - 5.0 = 6.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 5 Q:
1 4 - 5 + 12 *
1.0 - 4.0 = -3.0, -3.0 + 5.0 = 2.0, 2.0 * 12.0 = 24.0
A 4 5 K:
1 4 - 5 13 - *
1.0 - 4.0 = -3.0, 5.0 - 13.0 = -8.0, -3.0 * -8.0 = 24.0
A 4 6 6:
14+6 * 6 -
1.0 + 4.0 = 5.0, 5.0 * 6.0 = 30.0, 30.0 - 6.0 = 24.0
A 4 6 7:
14-7+6*
1.0 - 4.0 = -3.0, -3.0 + 7.0 = 4.0, 4.0 * 6.0 = 24.0
A 4 6 8:
14-6+8*
1.0 - 4.0 = -3.0, -3.0 + 6.0 = 3.0, 3.0 * 8.0 = 24.0
A 4 6 9:
6 9 1 4 + - >
1.0 + 4.0 = 5.0, 9.0 - 5.0 = 4.0, 6.0 * 4.0 = 24.0
A 4 6 10:
4 1 - 10 * 6 -
4.0 - 1.0 = 3.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
A 4 6 J:
1 6 - 11 + 4 *
1.0 - 6.0 = -5.0, -5.0 + 11.0 = 6.0, 6.0 * 4.0 = 24.0
A 4 6 Q:
1 4 12 6 - * *
12.0 - 6.0 = 6.0, 4.0 * 6.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 6 K:
1 4 + 6 13 + +
1.0 + 4.0 = 5.0, 6.0 + 13.0 = 19.0, 5.0 + 19.0 = 24.0
A 4 7 7:
17+74-*
1.0 + 7.0 = 8.0, 7.0 - 4.0 = 3.0, 8.0 * 3.0 = 24.0
A 4 7 8:
17+4*8-
1.0 + 7.0 = 8.0, 8.0 * 4.0 = 32.0, 32.0 - 8.0 = 24.0
A 4 7 9:
19-47-*
1.0 - 9.0 = -8.0, 4.0 - 7.0 = -3.0, -8.0 * -3.0 = 24.0
A 4 7 10:
A 4 7 J:
1 4 + 7 * 11 -
1.0 + 4.0 = 5.0, 5.0 * 7.0 = 35.0, 35.0 - 11.0 = 24.0
A 4 7 0:
14 + 712 + +
1.0 + 4.0 = 5.0, 7.0 + 12.0 = 19.0, 5.0 + 19.0 = 24.0
A 4 7 K:
1 4 7 + 13 + *
4.0 + 7.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 8 8:
1 4 8 * 8 - *
4.0 \times 8.0 = 32.0, 32.0 - 8.0 = 24.0, 1.0 \times 24.0 = 24.0
A 4 8 9:
1 4 8 * + 9 -
4.0 \times 8.0 = 32.0, 1.0 + 32.0 = 33.0, 33.0 - 9.0 = 24.0
A 4 8 10:
A 4 8 J:
1 4 + 8 11 + +
1.0 + 4.0 = 5.0, 8.0 + 11.0 = 19.0, 5.0 + 19.0 = 24.0
4.0 + 8.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
```

```
A 4 8 K:
18 - 13 + 4 *
1.0 - 8.0 = -7.0, -7.0 + 13.0 = 6.0, 6.0 * 4.0 = 24.0
A 4 9 9:
A 4 9 10:
1 4 + 9 10 + +
1.0 + 4.0 = 5.0, 9.0 + 10.0 = 19.0, 5.0 + 19.0 = 24.0
A 4 9 1:
1 4 9 + 11 + *
4.0 + 9.0 = 13.0, 13.0 + 11.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 9 0:
1 4 9 * 12 - *
4.0 \times 9.0 = 36.0, 36.0 - 12.0 = 24.0, 1.0 \times 24.0 = 24.0
A 4 9 K:
1 4 9 * + 13 -
4.0 * 9.0 = 36.0, 1.0 + 36.0 = 37.0, 37.0 - 13.0 = 24.0
A 4 10 10:
1 4 10 + 10 + *
4.0 + 10.0 = 14.0, 14.0 + 10.0 = 24.0, 1.0 * 24.0 = 24.0
A 4 10 J:
4 1 10 11 + - -
10.0 + 11.0 = 21.0, 1.0 - 21.0 = -20.0, 4.0 - -20.0 = 24.0
A 4 10 Q:
4 10 1 - * 12 -
10.0 - 1.0 = 9.0, 4.0 * 9.0 = 36.0, 36.0 - 12.0 = 24.0
A 4 J J:
A 4 J Q:
A 4 J K:
A 4 Q Q:
4 1 - 12 * 12 -
4.0 - 1.0 = 3.0, 3.0 \times 12.0 = 36.0, 36.0 - 12.0 = 24.0
A 4 Q K:
A 4 K K:
A 5 5 5:
5 1 5 / - 5 *
1.0 / 5.0 = 0.2, 5.0 - 0.2 = 4.8, 4.8 * 5.0 = 24.0
A 5 5 6:
15+5 * 6 -
1.0 + 5.0 = 6.0, 6.0 * 5.0 = 30.0, 30.0 - 6.0 = 24.0
A 5 5 7:
A 5 5 8:
A 5 5 9:
15+95-*
1.0 + 5.0 = 6.0, 9.0 - 5.0 = 4.0, 6.0 * 4.0 = 24.0
A 5 5 10:
5 10 5 - * 1 -
10.0 - 5.0 = 5.0, 5.0 * 5.0 = 25.0, 25.0 - 1.0 = 24.0
A 5 5 J:
1 5 - 5 11 - *
1.0 - 5.0 = -4.0, 5.0 - 11.0 = -6.0, -4.0 * -6.0 = 24.0
A 5 5 Q:
1 5 5 / + 12 *
5.0 / 5.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
A 5 5 K:
1 5 + 5 13 + +
1.0 + 5.0 = 6.0, 5.0 + 13.0 = 18.0, 6.0 + 18.0 = 24.0
A 5 6 6:
156 * 6 - *
5.0 \times 6.0 = 30.0, 30.0 - 6.0 = 24.0, 1.0 \times 24.0 = 24.0
A 5 6 7:
156 * + 7 -
5.0 \times 6.0 = 30.0, 1.0 + 30.0 = 31.0, 31.0 - 7.0 = 24.0
A 5 6 8:
15-8+6*
1.0 - 5.0 = -4.0, -4.0 + 8.0 = 4.0, 4.0 * 6.0 = 24.0
A 5 6 9:
1695-*
9.0 - 5.0 = 4.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 6 10:
15+106-*
1.0 + 5.0 = 6.0, 10.0 - 6.0 = 4.0, 6.0 * 4.0 = 24.0
A 5 6 J:
1 6 + 5 * 11 -
1.0 + 6.0 = 7.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
A 5 6 Q:
1 5 + 6 12 + +
1.0 + 5.0 = 6.0, 6.0 + 12.0 = 18.0, 6.0 + 18.0 = 24.0
A 5 6 K:
1 5 6 + 13 + *
5.0 + 6.0 = 11.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 7 7:
A 5 7 8:
15 - 7 + 8 *
1.0 - 5.0 = -4.0, -4.0 + 7.0 = 3.0, 3.0 * 8.0 = 24.0
A 5 7 9:
1.0 - 7.0 = -6.0, 5.0 - 9.0 = -4.0, -6.0 * -4.0 = 24.0
```

```
A 5 7 10:
1 7 5 / + 10 *
7.0 / 5.0 = 1.4, 1.0 + 1.4 = 2.4, 2.4 * 10.0 = 24.0
A 5 7 J:
15+711++
1.0 + 5.0 = 6.0, 7.0 + 11.0 = 18.0, 6.0 + 18.0 = 24.0
A 5 7 0:
1 5 7 + 12 + *
5.0 + 7.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 7 K:
1 5 - 7 13 - *
1.0 - 5.0 = -4.0, 7.0 - 13.0 = -6.0, -4.0 * -6.0 = 24.0
A 5 8 8:
185-8**
8.0 - 5.0 = 3.0, 3.0 * 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 8 9:
19-58-*
1.0 - 9.0 = -8.0, 5.0 - 8.0 = -3.0, -8.0 * -3.0 = 24.0
A 5 8 10:
1 5 + 8 10 + +
1.0 + 5.0 = 6.0, 8.0 + 10.0 = 18.0, 6.0 + 18.0 = 24.0
A 5 8 J:
1 5 8 + 11 + *
5.0 + 8.0 = 13.0, 13.0 + 11.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 8 Q:
1 5 + 12 8 - *
1.0 + 5.0 = 6.0, 12.0 - 8.0 = 4.0, 6.0 * 4.0 = 24.0
A 5 8 K:
5 13 8 - * 1 -
13.0 - 8.0 = 5.0, 5.0 * 5.0 = 25.0, 25.0 - 1.0 = 24.0
A 5 9 9:
15+99++
1.0 + 5.0 = 6.0, 9.0 + 9.0 = 18.0, 6.0 + 18.0 = 24.0
A 5 9 10:
1 5 9 + 10 + *
5.0 + 9.0 = 14.0, 14.0 + 10.0 = 24.0, 1.0 * 24.0 = 24.0
A 5 9 J:
5 1 9 11 + - -
9.0 + 11.0 = 20.0, 1.0 - 20.0 = -19.0, 5.0 - -19.0 = 24.0
A 5 9 0:
1 9 + 5 / 12 *
1.0 + 9.0 = 10.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
A 5 9 K:
1 5 + 13 9 - *
1.0 + 5.0 = 6.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
A 5 10 10:
5 1 10 10 + - -
10.0 + 10.0 = 20.0, 1.0 - 20.0 = -19.0, 5.0 - -19.0 = 24.0
A 5 10 J:
1 11 + 10 * 5 /
1.0 + 11.0 = 12.0, 12.0 * 10.0 = 120.0, 120.0 / 5.0 = 24.0
A 5 10 Q:
1 5 10 12 * / /
10.0 \times 12.0 = 120.0, 5.0 / 120.0 = 0.041666666666664, 1.0 / 0.04166666666666664 = 24.0
A 5 10 K:
10 5 13 1 - / /
13.0 - 1.0 = 12.0, 5.0 / 12.0 = 0.41666666666667, 10.0 / 0.41666666666667 = 24.0
A 5 J J:
11 11 * 1 - 5 /
11.0 \times 11.0 = 121.0, 121.0 - 1.0 = 120.0, 120.0 / 5.0 = 24.0
A 5 J Q:
11 1 - 5 / 12 *
11.0 - 1.0 = 10.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
A 5 J K:
A 5 0 0:
12 5 1 + / 12 *
5.0 + 1.0 = 6.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
A 5 0 K:
A 5 K K:
A 6 6 6:
61-6 * 6 -
6.0 - 1.0 = 5.0, 5.0 * 6.0 = 30.0, 30.0 - 6.0 = 24.0
A 6 6 7:
A 6 6 8:
6168/-/
6.0 / 8.0 = 0.75, 1.0 - 0.75 = 0.25, 6.0 / 0.25 = 24.0
A 6 6 9:
16-9+6*
1.0 - 6.0 = -5.0, -5.0 + 9.0 = 4.0, 4.0 * 6.0 = 24.0
A 6 6 10:
1 6 10 6 - * *
10.0 - 6.0 = 4.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 6 J:
1 6 + 6 11 + +
1.0 + 6.0 = 7.0, 6.0 + 11.0 = 17.0, 7.0 + 17.0 = 24.0
A 6 6 Q:
6.0 + 6.0 = 12.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
```

```
A 6 6 K:
1 6 6 * + 13 -
6.0 \times 6.0 = 36.0, 1.0 + 36.0 = 37.0, 37.0 - 13.0 = 24.0
A 6 7 7:
A 6 7 8:
A 6 7 9:
17+96-*
1.0 + 7.0 = 8.0, 9.0 - 6.0 = 3.0, 8.0 * 3.0 = 24.0
A 6 7 10:
1.6 + 7.10 + +
1.0 + 6.0 = 7.0, 7.0 + 10.0 = 17.0, 7.0 + 17.0 = 24.0
A 6 7 J:
1 6 7 + 11 + *
6.0 + 7.0 = 13.0, 13.0 + 11.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 7 Q:
1 6 - 7 + 12 *
1.0 - 6.0 = -5.0, -5.0 + 7.0 = 2.0, 2.0 * 12.0 = 24.0
A 6 7 K:
A 6 8 8:
16-8+8*
1.0 - 6.0 = -5.0, -5.0 + 8.0 = 3.0, 3.0 * 8.0 = 24.0
A 6 8 9:
16+89++
1.0 + 6.0 = 7.0, 8.0 + 9.0 = 17.0, 7.0 + 17.0 = 24.0
A 6 8 10:
1 6 8 + 10 + *
6.0 + 8.0 = 14.0, 14.0 + 10.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 8 J:
18 - 11 + 6 *
1.0 - 8.0 = -7.0, -7.0 + 11.0 = 4.0, 4.0 * 6.0 = 24.0
A 6 8 Q:
1 6 12 8 - * *
12.0 - 8.0 = 4.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 8 K:
1 13 - 6 8 - *
1.0 - 13.0 = -12.0, 6.0 - 8.0 = -2.0, -12.0 * -2.0 = 24.0
A 6 9 9:
169+9+*
6.0 + 9.0 = 15.0, 15.0 + 9.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 9 10:
6 1 9 10 + - -
9.0 + 10.0 = 19.0, 1.0 - 19.0 = -18.0, 6.0 - -18.0 = 24.0
A 6 9 J:
A 6 9 0:
1 9 - 12 + 6 *
1.0 - 9.0 = -8.0, -8.0 + 12.0 = 4.0, 4.0 * 6.0 = 24.0
A 6 9 K:
1 6 13 9 - * *
13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0, 1.0 * 24.0 = 24.0
A 6 10 10:
A 6 10 J:
A 6 10 Q:
10 6 1 - / 12 *
6.0 - 1.0 = 5.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
A 6 10 K:
1 10 - 13 + 6 *
1.0 - 10.0 = -9.0, -9.0 + 13.0 = 4.0, 4.0 * 6.0 = 24.0
A 6 J J:
A 6 J Q:
1 11 + 6 / 12 *
1.0 + 11.0 = 12.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
A 6 J K:
1 11 13 * + 6 /
11.0 \times 13.0 = 143.0, 1.0 + 143.0 = 144.0, 144.0 / 6.0 = 24.0
A 6 0 0:
1 6 12 12 * / /
A 6 Q K:
12 6 13 1 - / /
13.0 - 1.0 = 12.0, 6.0 / 12.0 = 0.5, 12.0 / 0.5 = 24.0
A 6 K K:
A 7 7 7:
A 7 7 8:
A 7 7 9:
17 + 79 + +
1.0 + 7.0 = 8.0, 7.0 + 9.0 = 16.0, 8.0 + 16.0 = 24.0
A 7 7 10:
1 7 7 + 10 + *
7.0 + 7.0 = 14.0, 14.0 + 10.0 = 24.0, 1.0 * 24.0 = 24.0
A 7 7 J:
1 7 - 7 11 - *
1.0 - 7.0 = -6.0, 7.0 - 11.0 = -4.0, -6.0 * -4.0 = 24.0
A 7 7 Q:
1 7 7 / + 12 *
7.0 / 7.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
A 7 7 K:
A 7 8 8:
1 7 + 8 8 + +
```

```
1.0 + 7.0 = 8.0, 8.0 + 8.0 = 16.0, 8.0 + 16.0 = 24.0
A 7 8 9:
178+9+*
7.0 + 8.0 = 15.0, 15.0 + 9.0 = 24.0, 1.0 * 24.0 = 24.0
A 7 8 10:
1 8 10 7 - * *
10.0 - 7.0 = 3.0, 8.0 * 3.0 = 24.0, 1.0 * 24.0 = 24.0
A 7 8 1:
17 + 118 - *
1.0 + 7.0 = 8.0, 11.0 - 8.0 = 3.0, 8.0 * 3.0 = 24.0
A 7 8 0:
17-8+12 *
1.0 - 7.0 = -6.0, -6.0 + 8.0 = 2.0, 2.0 * 12.0 = 24.0
A 7 8 K:
A 7 9 9:
7 1 9 9 +
9.0 + 9.0 = 18.0, 1.0 - 18.0 = -17.0, 7.0 - -17.0 = 24.0
A 7 9 10:
1 9 - 7 10 - *
1.0 - 9.0 = -8.0, 7.0 - 10.0 = -3.0, -8.0 * -3.0 = 24.0
A 7 9 J:
1 11 + 9 7 -
1.0 + 11.0 = 12.0, 9.0 - 7.0 = 2.0, 12.0 * 2.0 = 24.0
A 7 9 Q:
1 7 + 12 9 - *
1.0 + 7.0 = 8.0, 12.0 - 9.0 = 3.0, 8.0 * 3.0 = 24.0
A 7 9 K:
1 7 - 9 13 - *
1.0 - 7.0 = -6.0, 9.0 - 13.0 = -4.0, -6.0 * -4.0 = 24.0
A 7 10 10:
A 7 10 J:
A 7 10 Q:
10 7 1 + - 12 *
7.0 + 1.0 = 8.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
A 7 10 K:
1 7 + 13 10 - *
1.0 + 7.0 = 8.0, 13.0 - 10.0 = 3.0, 8.0 * 3.0 = 24.0
A 7 1 1:
A 7 1 0:
A 7 J K:
A 7 Q Q:
12 7 1 - / 12 *
7.0 - 1.0 = 6.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
A 7 Q K:
1 13 + 12 * 7 /
1.0 + 13.0 = 14.0, 14.0 * 12.0 = 168.0, 168.0 / 7.0 = 24.0
A 7 K K:
13 13 * 1 - 7 /
13.0 * 13.0 = 169.0, 169.0 - 1.0 = 168.0, 168.0 / 7.0 = 24.0
A 8 8 8:
188+8+*
8.0 + 8.0 = 16.0, 16.0 + 8.0 = 24.0, 1.0 * 24.0 = 24.0
A 8 8 9:
8 1 8 9 + -
8.0 + 9.0 = 17.0, 1.0 - 17.0 = -16.0, 8.0 - -16.0 = 24.0
A 8 8 10:
18 - 10 + 8 *
1.0 - 8.0 = -7.0, -7.0 + 10.0 = 3.0, 3.0 * 8.0 = 24.0
A 8 8 J:
1 8 11 8 - * *
11.0 - 8.0 = 3.0, 8.0 * 3.0 = 24.0, 1.0 * 24.0 = 24.0
A 8 8 0:
1 8 8 / + 12 *
8.0 / 8.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
A 8 8 K:
A 8 9 9:
A 8 9 10:
A 8 9 J:
19-811-*
1.0 - 9.0 = -8.0, 8.0 - 11.0 = -3.0, -8.0 * -3.0 = 24.0
A 8 9 0:
18-9+12 *
1.0 - 8.0 = -7.0, -7.0 + 9.0 = 2.0, 2.0 * 12.0 = 24.0
A 8 9 K:
8 13 9 1 + - *
9.0 + 1.0 = 10.0, 13.0 - 10.0 = 3.0, 8.0 * 3.0 = 24.0
A 8 10 10:
A 8 10 J:
1 11 + 10 8 - *
1.0 + 11.0 = 12.0, 10.0 - 8.0 = 2.0, 12.0 * 2.0 = 24.0
A 8 10 Q:
1 10 8 - 12 * *
10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 8 10 K:
1 8 13 10 - * *
13.0 - 10.0 = 3.0, 8.0 * 3.0 = 24.0, 1.0 * 24.0 = 24.0
A 8 J J:
A 8 J Q:
```

```
11 8 1 + - 12 *
8.0 + 1.0 = 9.0, 11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0
A 8 J K:
1 11 - 13 + 8 *
1.0 - 11.0 = -10.0, -10.0 + 13.0 = 3.0, 3.0 * 8.0 = 24.0
A 8 0 0:
12 12 8 / 1 - /
12.0 / 8.0 = 1.5, 1.5 - 1.0 = 0.5, 12.0 / 0.5 = 24.0
A 8 0 K:
A 8 K K:
A 9 9 9:
A 9 9 10:
A 9 9 J:
A 9 9 Q:
1 9 - 9 12 - *
1.0 - 9.0 = -8.0, 9.0 - 12.0 = -3.0, -8.0 * -3.0 = 24.0
A 9 9 K:
A 9 10 10:
A 9 10 J:
A 9 10 Q:
1 9 - 10 + 12 *
1.0 - 9.0 = -8.0, -8.0 + 10.0 = 2.0, 2.0 * 12.0 = 24.0
A 9 10 K:
1 9 - 10 13 - *
1.0 - 9.0 = -8.0, 10.0 - 13.0 = -3.0, -8.0 * -3.0 = 24.0
A 9 J J:
1 11 + 11 9 - *
1.0 + 11.0 = 12.0, 11.0 - 9.0 = 2.0, 12.0 * 2.0 = 24.0
A 9 J Q:
1 11 9 - 12 * *
11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 9 J K:
1 13 - 9 11 - *
1.0 - 13.0 = -12.0, 9.0 - 11.0 = -2.0, -12.0 * -2.0 = 24.0
A 9 Q Q:
12 9 1 + - 12 *
9.0 + 1.0 = 10.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
A 9 0 K:
A 9 K K:
A 10 10 10:
A 10 10 J:
A 10 10 0:
1 10 10 / + 12 *
10.0 / 10.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
A 10 10 K:
A 10 J J:
A 10 J 0:
1 10 - 11 + 12 *
1.0 - 10.0 = -9.0, -9.0 + 11.0 = 2.0, 2.0 * 12.0 = 24.0
A 10 J K:
A 10 Q Q:
1 12 10 - 12 * *
12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0, 1.0 * 24.0 = 24.0
A 10 Q K:
1 13 - 10 12 - *
1.0 - 13.0 = -12.0, 10.0 - 12.0 = -2.0, -12.0 * -2.0 = 24.0
A 10 K K:
AJJJ:
AJJQ:
1 11 11 / + 12 *
11.0 / 11.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
AJJK:
1 11 + 13 11 - *
1.0 + 11.0 = 12.0, 13.0 - 11.0 = 2.0, 12.0 * 2.0 = 24.0
AJQQ:
1 11 - 12 + 12 *
1.0 - 11.0 = -10.0, -10.0 + 12.0 = 2.0, 2.0 * 12.0 = 24.0
AJQK:
1 12 13 11 - * *
13.0 - 11.0 = 2.0, 12.0 * 2.0 = 24.0, 1.0 * 24.0 = 24.0
AJKK:
1 11 13 / + 13 *
11.0 / 13.0 = 0.8461538461538461, 1.0 + 0.8461538461538461 = 1.8461538461538463, 1.8461538461538461538463 * 13.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0 = 24.0
AQQQ:
1 12 12 / + 12 *
12.0 / 12.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
AQQK:
1 12 - 13 + 12 *
1.0 - 12.0 = -11.0, -11.0 + 13.0 = 2.0, 2.0 * 12.0 = 24.0
AQKK:
1 13 13 / + 12 *
13.0 / 13.0 = 1.0, 1.0 + 1.0 = 2.0, 2.0 * 12.0 = 24.0
AKKK:
2 2 2 2:
2 2 2 3:
2 2 + 2 3 *
2.0 + 2.0 = 4.0, 2.0 * 3.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 2 4:
```

```
22+24+*
2.0 + 2.0 = 4.0, 2.0 + 4.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 2 5:
2 2 2 5 * + *
2.0 \times 5.0 = 10.0, 2.0 + 10.0 = 12.0, 2.0 \times 12.0 = 24.0
2 2 2 6:
2 2 2 7:
2 2 7 * 2 - *
2.0 \times 7.0 = 14.0, 14.0 - 2.0 = 12.0, 2.0 \times 12.0 = 24.0
2 2 2 8:
2 2 2 + 8 + *
2.0 + 2.0 = 4.0, 4.0 + 8.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 2 9:
2 2 2 9 + * +
2.0 + 9.0 = 11.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 2 10:
2 2 + 2 10 * +
2.0 + 2.0 = 4.0, 2.0 * 10.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 2 J:
2 2 2 / 11 + *
2.0 / 2.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 2 Q:
2 2 + 2 - 12 *
2.0 + 2.0 = 4.0, 4.0 - 2.0 = 2.0, 2.0 * 12.0 = 24.0
2 2 2 K:
2 2 2 13 - * -
2.0 - 13.0 = -11.0, 2.0 * -11.0 = -22.0, 2.0 - -22.0 = 24.0
2 2 3 3:
2 2 + 3 3 + *
2.0 + 2.0 = 4.0, 3.0 + 3.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 3 4:
2 2 + 4 + 3 *
2.0 + 2.0 = 4.0, 4.0 + 4.0 = 8.0, 8.0 * 3.0 = 24.0
2 2 3 5:
25 * 2 - 3 *
2.0 \times 5.0 = 10.0, \ 10.0 - 2.0 = 8.0, \ 8.0 \times 3.0 = 24.0
2 2 3 6:
2 2 3 * 6 + *
2.0 * 3.0 = 6.0, 6.0 + 6.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 3 7:
2 2 3 + 7 + *
2.0 + 3.0 = 5.0, 5.0 + 7.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 3 8:
2 2 3 8 + * +
3.0 + 8.0 = 11.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 3 9:
2 2 3 / + 9 *
2 2 3 10:
2 3 10 + * 2 -
3.0 + 10.0 = 13.0, 2.0 * 13.0 = 26.0, 26.0 - 2.0 = 24.0
2 2 3 J:
2 3 2 - 11 + *
3.0 - 2.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 3 Q:
2 2 + 3 * 12 +
2.0 + 2.0 = 4.0, 4.0 * 3.0 = 12.0, 12.0 + 12.0 = 24.0
2 2 3 K:
2 2 3 - 13 + *
2.0 - 3.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 4 4:
2 2 4 * 4 + *
2.0 \times 4.0 = 8.0, 8.0 + 4.0 = 12.0, 2.0 \times 12.0 = 24.0
2 2 4 5:
22+45 * +
2.0 + 2.0 = 4.0, 4.0 * 5.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 4 6:
2 2 4 + 6 + *
2.0 + 4.0 = 6.0, 6.0 + 6.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 4 7:
2 2 4 7 + * +
4.0 + 7.0 = 11.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 4 8:
2 2 + 4 * 8 +
2.0 + 2.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
2 2 4 9:
2 2 9 * 4 + +
2.0 \times 9.0 = 18.0, 18.0 + 4.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 4 10:
2 2 + 10 4 - *
2.0 + 2.0 = 4.0, 10.0 - 4.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 4 J:
2 2 4 - 11 * -
2.0 - 4.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 2 4 Q:
2.0 + 4.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
```

```
2 2 13 * + 4 -
2.0 \times 13.0 = 26.0, 2.0 + 26.0 = 28.0, 28.0 - 4.0 = 24.0
2 2 5 5:
225 + 5 + 7
2.0 + 5.0 = 7.0, 7.0 + 5.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 5 6:
2 2 5 6 + * +
5.0 + 6.0 = 11.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 5 7:
25 * 27 * +
2.0 \times 5.0 = 10.0, 2.0 \times 7.0 = 14.0, 10.0 + 14.0 = 24.0
2 2 5 8:
2 5 8 + * 2 -
5.0 + 8.0 = 13.0, 2.0 * 13.0 = 26.0, 26.0 - 2.0 = 24.0
2 2 5 9:
2 5 2 - 9 + *
5.0 - 2.0 = 3.0, 3.0 + 9.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 5 10:
2 2 5 + * 10 +
2.0 + 5.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
2 2 5 J:
2 2 + 11 5 - *
2.0 + 2.0 = 4.0, 11.0 - 5.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 5 Q:
2 2 5 * 12 + +
2.0 * 5.0 = 10.0, 10.0 + 12.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 5 K:
2 2 6 6:
26+2/6*
2.0 + 6.0 = 8.0, 8.0 / 2.0 = 4.0, 4.0 * 6.0 = 24.0
2 2 6 7:
2 2 7 + * 6 +
2.0 + 7.0 = 9.0, 2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0
2 2 6 8:
2 2 6 + * 8 +
2.0 + 6.0 = 8.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
2 2 6 9:
2 2 9 * 6 - *
2.0 * 9.0 = 18.0, 18.0 - 6.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 6 10:
2 2 6 * 10 + +
2.0 \times 6.0 = 12.0, 12.0 + 10.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 6 J:
2 11 2 - * 6 +
11.0 - 2.0 = 9.0, 2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0
2 2 6 Q:
2 2 + 12 6 - *
2.0 + 2.0 = 4.0, 12.0 - 6.0 = 6.0, 4.0 * 6.0 = 24.0
2 2 6 K:
2 2 13 + * 6 -
2.0 + 13.0 = 15.0, 2.0 * 15.0 = 30.0, 30.0 - 6.0 = 24.0
2 2 7 7:
272-7+*
7.0 - 2.0 = 5.0, 5.0 + 7.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 7 8:
2 2 7 * 8 + +
2.0 * 7.0 = 14.0, 14.0 + 8.0 = 22.0, 2.0 + 22.0 = 24.0
2 2 7 9:
2 2 7 10:
2 7 10 2 / + *
10.0 / 2.0 = 5.0, 7.0 + 5.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 7 J:
2 2 7 Q:
2 7 * 2 - 12 +
2.0 \times 7.0 = 14.0, 14.0 - 2.0 = 12.0, 12.0 + 12.0 = 24.0
2 2 7 K:
2 2 + 7 13 + +
2.0 + 2.0 = 4.0, 7.0 + 13.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 8 8:
2 2 + 8 * 8 -
2.0 + 2.0 = 4.0, 4.0 * 8.0 = 32.0, 32.0 - 8.0 = 24.0
2 2 8 9:
29 * 8 + 2 -
2.0 * 9.0 = 18.0, 18.0 + 8.0 = 26.0, 26.0 - 2.0 = 24.0
2 2 8 10:
2 2 10 * 8 - *
2.0 * 10.0 = 20.0, 20.0 - 8.0 = 12.0, 2.0 * 12.0 = 24.0
2 2 8 1:
2 2 8 Q:
2 2 + 8 12 + +
2.0 + 2.0 = 4.0, 8.0 + 12.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 8 K:
2 2 9 9:
2 2 9 10:
2 9 2 - * 10 +
9.0 - 2.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
2 2 9 J:
2 2 + 9 11 + +
```

```
2.0 + 2.0 = 4.0, 9.0 + 11.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 9 Q:
2 2 + 9 * 12 -
2.0 + 2.0 = 4.0, 4.0 * 9.0 = 36.0, 36.0 - 12.0 = 24.0
2 2 9 K:
2 2 10 10:
2 2 + 10 10 + +
2.0 + 2.0 = 4.0, 10.0 + 10.0 = 20.0, 4.0 + 20.0 = 24.0
2 2 10 J:
2 2 11 * 10 - *
2.0 \times 11.0 = 22.0, 22.0 - 10.0 = 12.0, 2.0 \times 12.0 = 24.0
2 2 10 0:
2 2 10 K:
2 2 / 10 13 + +
2.0 / 2.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
2 2 J J:
2 2 11 / + 11 *
2.0 \ / \ 11.0 = 0.1818181818181818182, \ 2.0 \ + \ 0.18181818181818182 = 2.1818181818181817, \ 2.1818181818181818181 \ \star \ 11.0 = 24.0
2 2 J Q:
2 2 / 11 12 + +
2.0 / 2.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
2 2 J K:
2 2 11 13 + - -
11.0 + 13.0 = 24.0, 2.0 - 24.0 = -22.0, 2.0 - -22.0 = 24.0
2 2 Q Q:
2 2 12 12 + -
12.0 + 12.0 = 24.0, 2.0 - 24.0 = -22.0, 2.0 - -22.0 = 24.0
2 2 Q K:
12 2 2 / - 13 +
2.0 / 2.0 = 1.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
2 2 K K:
2 2 13 / - 13 *
2.0 \ / \ 13.0 \ = \ 0.15384615384615384615385, \ 2.0 \ - \ 0.15384615384615385 \ = \ 1.8461538461538463, \ 1.8461538461538463 \ \star \ 13.0 \ = \ 24.0 \ + \ 13.0 \ = \ 1.8461538461538463 \ + \ 13.0 \ = \ 1.8461538463 \ + \ 1.8461538461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.8461538463 \ + \ 1.846153844 \ + \ 1.8461538443 \ + \ 1.8461538443 \ + \ 1.8461538443 \ + \ 1.8461538443 
2 3 3 3:
2 3 + 3 + 3 *
2.0 + 3.0 = 5.0, 5.0 + 3.0 = 8.0, 8.0 * 3.0 = 24.0
2 3 3 4:
2 3 3 5:
235 * 3 - *
3.0 \times 5.0 = 15.0, 15.0 - 3.0 = 12.0, 2.0 \times 12.0 = 24.0
2 3 3 6:
2 3 3 + 6 + *
3.0 + 3.0 = 6.0, 6.0 + 6.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 3 7:
2373-*
7.0 - 3.0 = 4.0, 3.0 * 4.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 3 8:
2 3 * 3 - 8 *
2.0 \times 3.0 = 6.0, 6.0 - 3.0 = 3.0, 3.0 \times 8.0 = 24.0
2 3 3 9:
2 3 + 3 * 9 +
2.0 + 3.0 = 5.0, 5.0 * 3.0 = 15.0, 15.0 + 9.0 = 24.0
2 3 3 10:
3 3 10 2 / + *
10.0 / 2.0 = 5.0, 3.0 + 5.0 = 8.0, 3.0 * 8.0 = 24.0
2 3 3 J:
2 3 3 / 11 + *
3.0 / 3.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 3 Q:
2 3 + 3 - 12 *
2.0 + 3.0 = 5.0, 5.0 - 3.0 = 2.0, 2.0 * 12.0 = 24.0
2 3 3 K:
2 3 3 * 13 + +
3.0 \times 3.0 = 9.0, 9.0 + 13.0 = 22.0, 2.0 + 22.0 = 24.0
2 3 4 4:
2 3 + 4 * 4 +
2.0 + 3.0 = 5.0, 5.0 * 4.0 = 20.0, 20.0 + 4.0 = 24.0
2 3 4 5:
2 3 4 + 5 + *
3.0 + 4.0 = 7.0, 7.0 + 5.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 4 6:
2 3 6 * 4 + +
3.0 \times 6.0 = 18.0, 18.0 + 4.0 = 22.0, 2.0 + 22.0 = 24.0
2 3 4 7:
2 3 7 + * 4 +
3.0 + 7.0 = 10.0, 2.0 * 10.0 = 20.0, 20.0 + 4.0 = 24.0
2 3 4 8:
2 3 - 4 + 8 *
2.0 - 3.0 = -1.0, -1.0 + 4.0 = 3.0, 3.0 * 8.0 = 24.0
2 3 4 9:
2349 * / /
2 3 4 10:
2 3 4 + * 10 +
3.0 + 4.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
2 3 4 J:
2 3 11 + * 4 -
3.0 + 11.0 = 14.0, 2.0 * 14.0 = 28.0, 28.0 - 4.0 = 24.0
```

```
2 3 4 0:
2 3 * 4 - 12 *
2.0 \times 3.0 = 6.0, 6.0 - 4.0 = 2.0, 2.0 \times 12.0 = 24.0
2 3 4 K:
2 3 4 - 13 + *
3.0 - 4.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 5 5:
23-55*+
2.0 - 3.0 = -1.0, 5.0 * 5.0 = 25.0, -1.0 + 25.0 = 24.0
2 3 5 6:
23-5+6*
2.0 - 3.0 = -1.0, -1.0 + 5.0 = 4.0, 4.0 * 6.0 = 24.0
2 3 5 7:
2 3 5 * 7 + +
3.0 * 5.0 = 15.0, 15.0 + 7.0 = 22.0, 2.0 + 22.0 = 24.0
2 3 5 8:
2 3 5 + * 8 +
3.0 + 5.0 = 8.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
2 3 5 9:
2 3 9 5 - * *
9.0 - 5.0 = 4.0, 3.0 * 4.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 5 10:
2 5 3 - 10 + *
5.0 - 3.0 = 2.0, 2.0 + 10.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 5 J:
2 3 5 - 11 * -
3.0 - 5.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 3 5 Q:
12 3 5 2 / - /
5.0 / 2.0 = 2.5, 3.0 - 2.5 = 0.5, 12.0 / 0.5 = 24.0
2 3 5 K:
2 3 * 5 13 + +
2.0 \times 3.0 = 6.0, 5.0 + 13.0 = 18.0, 6.0 + 18.0 = 24.0
2 3 6 6:
2 3 6 + * 6 +
3.0 + 6.0 = 9.0, 2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0
2 3 6 7:
27 * 6 - 3 *
2.0 * 7.0 = 14.0, 14.0 - 6.0 = 8.0, 8.0 * 3.0 = 24.0
2 3 6 8:
28+3 * 6 -
2.0 + 8.0 = 10.0, 10.0 * 3.0 = 30.0, 30.0 - 6.0 = 24.0
2 3 6 9:
26 + 3 / 9 *
2 3 6 10:
2 3 10 6 - * *
10.0 - 6.0 = 4.0, 3.0 * 4.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 6 J:
2 6 3 / 11 * +
6.0 / 3.0 = 2.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 3 6 Q:
2 3 * 6 12 + +
2.0 * 3.0 = 6.0, 6.0 + 12.0 = 18.0, 6.0 + 18.0 = 24.0
2 3 6 K:
2 3 + 6 13 + +
2.0 + 3.0 = 5.0, 6.0 + 13.0 = 19.0, 5.0 + 19.0 = 24.0
2 3 7 7:
2 7 * 3 7 + +
2.0 \times 7.0 = 14.0, 3.0 + 7.0 = 10.0, 14.0 + 10.0 = 24.0
2 3 7 8:
27+3/8*
2.0 + 7.0 = 9.0, 9.0 / 3.0 = 3.0, 3.0 * 8.0 = 24.0
2 3 7 9:
2 3 7 * 9 - *
3.0 \times 7.0 = 21.0, 21.0 - 9.0 = 12.0, 2.0 \times 12.0 = 24.0
2 3 7 10:
2 7 10 * + 3 /
7.0 * 10.0 = 70.0, 2.0 + 70.0 = 72.0, 72.0 / 3.0 = 24.0
2371:
23 + 7 * 11 -
2.0 + 3.0 = 5.0, 5.0 * 7.0 = 35.0, 35.0 - 11.0 = 24.0
2 3 7 0:
2 3 + 7 12 + +
2.0 + 3.0 = 5.0, 7.0 + 12.0 = 19.0, 5.0 + 19.0 = 24.0
2 3 7 K:
2 7 * 3 - 13 +
2.0 * 7.0 = 14.0, 14.0 - 3.0 = 11.0, 11.0 + 13.0 = 24.0
2 3 8 8:
28 * 8 - 3 *
2.0 \times 8.0 = 16.0, 16.0 - 8.0 = 8.0, 8.0 \times 3.0 = 24.0
2 3 8 9:
8 2 9 3 - /
2 3 8 10:
2 3 * 8 10 + +
2.0 * 3.0 = 6.0, 8.0 + 10.0 = 18.0, 6.0 + 18.0 = 24.0
2 3 8 J:
```

```
2 3 + 8 11 + +
2.0 + 3.0 = 5.0, 8.0 + 11.0 = 19.0, 5.0 + 19.0 = 24.0
2 3 8 Q:
2 3 8 * 12 - *
3.0 \times 8.0 = 24.0, 24.0 - 12.0 = 12.0, 2.0 \times 12.0 = 24.0
2 3 8 K:
2 3 13 + * 8 -
3.0 + 13.0 = 16.0, 2.0 * 16.0 = 32.0, 32.0 - 8.0 = 24.0
2 3 9 9:
23 * 99 + +
2.0 \times 3.0 = 6.0, 9.0 + 9.0 = 18.0, 6.0 + 18.0 = 24.0
2 3 9 10:
2 3 + 9 10 + +
2.0 + 3.0 = 5.0, 9.0 + 10.0 = 19.0, 5.0 + 19.0 = 24.0
2 3 9 1:
2 3 9 Q:
2 9 3 - * 12 +
9.0 - 3.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
2 3 9 K:
2 3 13 9 - * *
13.0 - 9.0 = 4.0, 3.0 * 4.0 = 12.0, 2.0 * 12.0 = 24.0
2 3 10 10:
2 10 3 - * 10 +
10.0 - 3.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
2 3 10 J:
2 3 10 Q:
2 10 + 3 * 12 -
2.0 + 10.0 = 12.0, 12.0 * 3.0 = 36.0, 36.0 - 12.0 = 24.0
2 3 10 K:
3 2 10 13 +
10.0 + 13.0 = 23.0, 2.0 - 23.0 = -21.0, 3.0 - -21.0 = 24.0
2 3 J J:
2 3 11 * + 11 -
3.0 \times 11.0 = 33.0, 2.0 + 33.0 = 35.0, 35.0 - 11.0 = 24.0
2 3 J Q:
3 2 11 12 + -
11.0 + 12.0 = 23.0, 2.0 - 23.0 = -21.0, 3.0 - -21.0 = 24.0
2 3 1 K:
3 2 - 11 13 + *
3.0 - 2.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
2 3 0 0:
3 2 - 12 12 + *
3.0 - 2.0 = 1.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
2 3 0 K:
2 3 12 13 + - -
12.0 + 13.0 = 25.0, 3.0 - 25.0 = -22.0, 2.0 - -22.0 = 24.0
2 3 K K:
3 13 * 2 13 + -
3.0 \times 13.0 = 39.0, 2.0 + 13.0 = 15.0, 39.0 - 15.0 = 24.0
2 4 4 4:
2 4 4 + 4 + *
4.0 + 4.0 = 8.0, 8.0 + 4.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 4 5:
2 5 + 4 * 4 -
2.0 + 5.0 = 7.0, 7.0 * 4.0 = 28.0, 28.0 - 4.0 = 24.0
2 4 4 6:
2 4 4 * 6 + +
4.0 * 4.0 = 16.0, 16.0 + 6.0 = 22.0, 2.0 + 22.0 = 24.0
2 4 4 7:
2 4 7 4 - * *
7.0 - 4.0 = 3.0, 4.0 * 3.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 4 8:
2 4 4 + * 8 +
4.0 + 4.0 = 8.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
2 4 4 9:
492-*4-
9.0 - 2.0 = 7.0, 4.0 * 7.0 = 28.0, 28.0 - 4.0 = 24.0
2 4 4 10:
2 4 10 + * 4 -
4.0 + 10.0 = 14.0, 2.0 * 14.0 = 28.0, 28.0 - 4.0 = 24.0
2 4 4 J:
2 4 4 / 11 + *
4.0 / 4.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 4 0:
2 4 + 4 - 12 *
2.0 + 4.0 = 6.0, 6.0 - 4.0 = 2.0, 2.0 * 12.0 = 24.0
2 4 4 K:
2 13 4 4 / - *
4.0 / 4.0 = 1.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 5 5:
2 5 5 + * 4 +
5.0 + 5.0 = 10.0, 2.0 * 10.0 = 20.0, 20.0 + 4.0 = 24.0
2 4 5 6:
2 4 5 + * 6 +
4.0 + 5.0 = 9.0, 2.0 * 9.0 = 18.0, 18.0 + 6.0 = 24.0
2 4 5 7:
```

```
2 4 5 8:
2 4 - 5 + 8 *
2.0 - 4.0 = -2.0, -2.0 + 5.0 = 3.0, 3.0 * 8.0 = 24.0
2 4 5 9:
24+95-*
2.0 + 4.0 = 6.0, 9.0 - 5.0 = 4.0, 6.0 * 4.0 = 24.0
2 4 5 10:
25 * 4 10 + +
2.0 \times 5.0 = 10.0, 4.0 + 10.0 = 14.0, 10.0 + 14.0 = 24.0
2 4 5 1:
2 4 * 5 11 + +
2.0 \times 4.0 = 8.0, 5.0 + 11.0 = 16.0, 8.0 + 16.0 = 24.0
2 4 5 Q:
25-412-*
2.0 - 5.0 = -3.0, 4.0 - 12.0 = -8.0, -3.0 * -8.0 = 24.0
2 4 5 K:
2 4 + 5 13 + +
2.0 + 4.0 = 6.0, 5.0 + 13.0 = 18.0, 6.0 + 18.0 = 24.0
2 4 6 6:
24-6+6*
2.0 - 4.0 = -2.0, -2.0 + 6.0 = 4.0, 4.0 * 6.0 = 24.0
2 4 6 7:
2 4 7 * + 6 -
4.0 \times 7.0 = 28.0, 2.0 + 28.0 = 30.0, 30.0 - 6.0 = 24.0
2 4 6 9:
2 4 6 / + 9 *
2 4 6 10:
2 4 * 6 10 + +
2.0 \times 4.0 = 8.0, 6.0 + 10.0 = 16.0, 8.0 + 16.0 = 24.0
2 4 6 J:
2 4 6 - 11 * -
4.0 - 6.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 4 6 0:
2 4 + 6 12 + +
2.0 + 4.0 = 6.0, 6.0 + 12.0 = 18.0, 6.0 + 18.0 = 24.0
2 4 6 K:
2 13 * 6 - 4 +
2.0 \times 13.0 = 26.0, 26.0 - 6.0 = 20.0, 20.0 + 4.0 = 24.0
2 4 7 7:
277+*4-
7.0 + 7.0 = 14.0, 2.0 * 14.0 = 28.0, 28.0 - 4.0 = 24.0
2 4 7 8:
27 * 8 - 4 *
2.0 \times 7.0 = 14.0, 14.0 - 8.0 = 6.0, 6.0 \times 4.0 = 24.0
2 4 7 9:
24 * 79 + +
2.0 * 4.0 = 8.0, 7.0 + 9.0 = 16.0, 8.0 + 16.0 = 24.0
2 4 7 10:
2 4 10 7 - * *
10.0 - 7.0 = 3.0, 4.0 * 3.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 7 J:
2 4 + 7 11 + +
2.0 + 4.0 = 6.0, 7.0 + 11.0 = 18.0, 6.0 + 18.0 = 24.0
2 4 7 Q:
2 7 + 4 * 12 -
2.0 + 7.0 = 9.0, 9.0 * 4.0 = 36.0, 36.0 - 12.0 = 24.0
2 4 7 K:
2 4 8 8:
2 4 * 8 8 + +
2.0 * 4.0 = 8.0, 8.0 + 8.0 = 16.0, 8.0 + 16.0 = 24.0
2 4 8 9:
8 9 2 4 + -
2.0 + 4.0 = 6.0, 9.0 - 6.0 = 3.0, 8.0 * 3.0 = 24.0
2 4 8 10:
2 4 + 8 10 + +
2.0 + 4.0 = 6.0, 8.0 + 10.0 = 18.0, 6.0 + 18.0 = 24.0
2 4 8 1.
2 4 11 8 - * *
11.0 - 8.0 = 3.0, 4.0 * 3.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 8 Q:
2 4 + 12 8 - *
2.0 + 4.0 = 6.0, 12.0 - 8.0 = 4.0, 6.0 * 4.0 = 24.0
2 4 8 K:
2 13 * 8 4 / -
2.0 \times 13.0 = 26.0, 8.0 / 4.0 = 2.0, 26.0 - 2.0 = 24.0
2 4 9 9:
2 4 + 9 9 + +
2.0 + 4.0 = 6.0, 9.0 + 9.0 = 18.0, 6.0 + 18.0 = 24.0
2 4 9 10:
29 * 4 - 10 +
2.0 * 9.0 = 18.0, 18.0 - 4.0 = 14.0, 14.0 + 10.0 = 24.0
2 4 9 J:
2 4 9 Q:
2 4 12 9 - * *
```

```
12.0 - 9.0 = 3.0, 4.0 * 3.0 = 12.0, 2.0 * 12.0 = 24.0
2 4 9 K:
2 4 + 13 9 - *
2.0 + 4.0 = 6.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
2 4 10 10:
2 4 10 / + 10 *
4.0 / 10.0 = 0.4, 2.0 + 0.4 = 2.4, 2.4 * 10.0 = 24.0
2 4 10 1:
2 11 4 - * 10 +
11.0 - 4.0 = 7.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
2 4 10 Q:
2 10 4 - * 12 +
10.0 - 4.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
2 4 10 K:
2 4 13 + * 10 -
4.0 + 13.0 = 17.0, 2.0 * 17.0 = 34.0, 34.0 - 10.0 = 24.0
2 4 J J:
4 2 11 11 + - -
11.0 + 11.0 = 22.0, 2.0 - 22.0 = -20.0, 4.0 - -20.0 = 24.0
2 4 J Q:
4 11 2 - * 12 -
11.0 - 2.0 = 9.0, 4.0 * 9.0 = 36.0, 36.0 - 12.0 = 24.0
2 4 J K:
2 4 Q Q:
4 12 * 2 12 * -
4.0 * 12.0 = 48.0, 2.0 * 12.0 = 24.0, 48.0 - 24.0 = 24.0
2 4 Q K:
2 4 K K:
2 4 13 13 + - -
13.0 + 13.0 = 26.0, 4.0 - 26.0 = -22.0, 2.0 - -22.0 = 24.0
2 5 5 5:
2 5 5 6:
2 5 5 7:
27 * 55 + +
2.0 \times 7.0 = 14.0, 5.0 + 5.0 = 10.0, 14.0 + 10.0 = 24.0
2 5 5 8:
255/+8*
5.0 / 5.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
2 5 5 9:
25 * 59 + +
2.0 \times 5.0 = 10.0, 5.0 + 9.0 = 14.0, 10.0 + 14.0 = 24.0
2 5 5 10:
5 2 10 / - 5 *
2.0 / 10.0 = 0.2, 5.0 - 0.2 = 4.8, 4.8 * 5.0 = 24.0
2 5 5 J:
2 5 + 5 * 11 -
2.0 + 5.0 = 7.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
2 5 5 Q:
2 5 + 5 12 + +
2.0 + 5.0 = 7.0, 5.0 + 12.0 = 17.0, 7.0 + 17.0 = 24.0
2 5 5 K:
2 5 - 5 13 - *
2.0 - 5.0 = -3.0, 5.0 - 13.0 = -8.0, -3.0 * -8.0 = 24.0
2 5 6 6:
2.0 * 5.0 = 10.0, 10.0 - 6.0 = 4.0, 4.0 * 6.0 = 24.0
2 5 6 7:
2 5 - 7 + 6 *
2.0 - 5.0 = -3.0, -3.0 + 7.0 = 4.0, 4.0 * 6.0 = 24.0
2 5 6 8:
25-6+8*
2.0 - 5.0 = -3.0, -3.0 + 6.0 = 3.0, 3.0 * 8.0 = 24.0
2 5 6 9:
52/6*9+
5.0 / 2.0 = 2.5, 2.5 * 6.0 = 15.0, 15.0 + 9.0 = 24.0
2 5 6 10:
2 5 6 10 * / /
6.0 * 10.0 = 60.0, 5.0 / 60.0 = 0.083333333333333, 2.0 / 0.0833333333333 = 24.0
2 5 6 1:
2 5 + 6 11 + +
2.0 + 5.0 = 7.0, 6.0 + 11.0 = 17.0, 7.0 + 17.0 = 24.0
2 5 6 Q:
2 6 5 - 12 * *
6.0 - 5.0 = 1.0, 1.0 * 12.0 = 12.0, 2.0 * 12.0 = 24.0
2 5 6 K:
2 5 6 - 13 + *
5.0 - 6.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 5 7 7:
25 * 77 + +
2.0 * 5.0 = 10.0, 7.0 + 7.0 = 14.0, 10.0 + 14.0 = 24.0
2 5 7 8:
25 * 7 - 8 *
2.0 * 5.0 = 10.0, 10.0 - 7.0 = 3.0, 3.0 * 8.0 = 24.0
2 5 7 9:
5 7 * 2 9 + -
5.0 \times 7.0 = 35.0, 2.0 + 9.0 = 11.0, 35.0 - 11.0 = 24.0
2 5 7 10:
2 5 + 7 10 + +
```

```
2.0 + 5.0 = 7.0, 7.0 + 10.0 = 17.0, 7.0 + 17.0 = 24.0
2 5 7 J:
2 5 7 - 11 * -
5.0 - 7.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 5 7 0:
2 5 7 K:
257 * + 13 -
5.0 * 7.0 = 35.0, 2.0 + 35.0 = 37.0, 37.0 - 13.0 = 24.0
2 5 8 8:
58 * 28 *
5.0 \times 8.0 = 40.0, 2.0 \times 8.0 = 16.0, 40.0 - 16.0 = 24.0
2 5 8 9:
25+89++
2.0 + 5.0 = 7.0, 8.0 + 9.0 = 17.0, 7.0 + 17.0 = 24.0
2 5 8 10:
2 10 - 5 8 - *
2.0 - 10.0 = -8.0, 5.0 - 8.0 = -3.0, -8.0 * -3.0 = 24.0
258J:
2 5 11 + * 8 -
5.0 + 11.0 = 16.0, 2.0 * 16.0 = 32.0, 32.0 - 8.0 = 24.0
2 5 8 Q:
25 * 8 - 12 *
2.0 * 5.0 = 10.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
2 5 8 K:
2 8 * 5 - 13 +
2.0 * 8.0 = 16.0, 16.0 - 5.0 = 11.0, 11.0 + 13.0 = 24.0
2 5 9 9:
2 5 9 10:
2 10 * 9 + 5 -
2.0 \times 10.0 = 20.0, 20.0 + 9.0 = 29.0, 29.0 - 5.0 = 24.0
259J:
29 * 5 - 11 +
2.0 \times 9.0 = 18.0, 18.0 - 5.0 = 13.0, 13.0 + 11.0 = 24.0
2 5 9 Q:
5 2 9 12 + -
9.0 + 12.0 = 21.0, 2.0 - 21.0 = -19.0, 5.0 - -19.0 = 24.0
2 5 9 K:
2 5 10 10:
2 10 + 5 / 10 *
2.0 + 10.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
2 5 10 1:
2 10 5 / 11 * +
10.0 / 5.0 = 2.0, 2.0 * 11.0 = 22.0, 2.0 + 22.0 = 24.0
2 5 10 0:
2 5 12 + * 10 -
5.0 + 12.0 = 17.0, 2.0 * 17.0 = 34.0, 34.0 - 10.0 = 24.0
2 5 10 K:
2 13 * 10 5 / -
2.0 * 13.0 = 26.0, 10.0 / 5.0 = 2.0, 26.0 - 2.0 = 24.0
2 5 J J:
2 5 J Q:
2 11 5 - * 12 +
11.0 - 5.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
2 5 J K:
2 5 Q Q:
5 2 - 12 * 12 -
5.0 - 2.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
2 5 Q K:
2 5 13 + * 12 -
5.0 + 13.0 = 18.0, 2.0 * 18.0 = 36.0, 36.0 - 12.0 = 24.0
2 5 K K:
2 6 6 6:
26 * 66 + +
2.0 \times 6.0 = 12.0, 6.0 + 6.0 = 12.0, 12.0 + 12.0 = 24.0
2 6 6 7:
667 * + 2 /
6.0 \times 7.0 = 42.0, 6.0 + 42.0 = 48.0, 48.0 / 2.0 = 24.0
2 6 6 8:
266/+8*
6.0 / 6.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
2669:
26+96-
2.0 + 6.0 = 8.0, 9.0 - 6.0 = 3.0, 8.0 * 3.0 = 24.0
2 6 6 10:
2 6 + 6 10 + +
2.0 + 6.0 = 8.0, 6.0 + 10.0 = 16.0, 8.0 + 16.0 = 24.0
2 6 6 J:
2 6 6 / 11 + *
6.0 / 6.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 6 Q:
2 6 + 6 - 12 *
2.0 + 6.0 = 8.0, 8.0 - 6.0 = 2.0, 2.0 * 12.0 = 24.0
2 6 6 K:
2 13 6 6 / - *
6.0 / 6.0 = 1.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 7 7:
2 6 7 8:
2 6 - 7 + 8 *
```

```
2.0 - 6.0 = -4.0, -4.0 + 7.0 = 3.0, 3.0 * 8.0 = 24.0
2 6 7 9:
26+79++
2.0 + 6.0 = 8.0, 7.0 + 9.0 = 16.0, 8.0 + 16.0 = 24.0
2 6 7 10:
2 6 + 10 7 - *
2.0 + 6.0 = 8.0, 10.0 - 7.0 = 3.0, 8.0 * 3.0 = 24.0
2 6 7 J:
2 7 6 - 11 + *
7.0 - 6.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 7 Q:
2 7 6 - 12 * *
7.0 - 6.0 = 1.0, 1.0 * 12.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 7 K:
2 6 7 - 13 + *
6.0 - 7.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 8 8:
2 6 + 8 8 + +
2.0 + 6.0 = 8.0, 8.0 + 8.0 = 16.0, 8.0 + 16.0 = 24.0
2 6 8 9:
2689*/
8.0 \times 9.0 = 72.0, 6.0 / 72.0 = 0.0833333333333333, 2.0 / 0.08333333333333 = 24.0
2 6 8 10:
2 6 10 + * 8 -
6.0 + 10.0 = 16.0, 2.0 * 16.0 = 32.0, 32.0 - 8.0 = 24.0
2 6 8 J:
2 6 8 - 11 *
6.0 - 8.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 6 8 Q:
28 * 12 - 6 *
2.0 \times 8.0 = 16.0, 16.0 - 12.0 = 4.0, 4.0 \times 6.0 = 24.0
2 6 8 K:
2 13 * 8 - 6 +
2.0 \times 13.0 = 26.0, 26.0 - 8.0 = 18.0, 18.0 + 6.0 = 24.0
2699:
269/+9*
2 6 9 10:
2 10 - 6 9 - *
2.0 - 10.0 = -8.0, 6.0 - 9.0 = -3.0, -8.0 * -3.0 = 24.0
2691:
2 6 11 9 - * *
11.0 - 9.0 = 2.0, 6.0 * 2.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 9 0:
2 6 + 12 9 - *
2.0 + 6.0 = 8.0, 12.0 - 9.0 = 3.0, 8.0 * 3.0 = 24.0
2 6 9 K:
2 6 10 10:
2 10 * 6 - 10 +
2.0 * 10.0 = 20.0, 20.0 - 6.0 = 14.0, 14.0 + 10.0 = 24.0
2 6 10 J:
2 6 11 + * 10 -
6.0 + 11.0 = 17.0, 2.0 * 17.0 = 34.0, 34.0 - 10.0 = 24.0
2 6 10 Q:
2 6 * 10 - 12 *
2.0 * 6.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
2 6 10 K:
2 6 + 13 10 - *
2.0 + 6.0 = 8.0, 13.0 - 10.0 = 3.0, 8.0 * 3.0 = 24.0
2 6 J J:
2 6 J Q:
2 11 6 / 12 * +
2 6 J K:
2 6 13 11 - * *
13.0 - 11.0 = 2.0, 6.0 * 2.0 = 12.0, 2.0 * 12.0 = 24.0
2 6 0 0:
2 6 12 + * 12 -
6.0 + 12.0 = 18.0, 2.0 * 18.0 = 36.0, 36.0 - 12.0 = 24.0
2 6 Q K:
2 13 * 12 6 / -
2.0 * 13.0 = 26.0, 12.0 / 6.0 = 2.0, 26.0 - 2.0 = 24.0
2 6 K K:
2 7 7 7:
2 7 7 8:
27 + 78 + +
2.0 + 7.0 = 9.0, 7.0 + 8.0 = 15.0, 9.0 + 15.0 = 24.0
2 7 7 9:
2 7 7 10:
2 10 7 / + 7 *
10.0 \ / \ 7.0 = 1.4285714285714286, \ 2.0 \ + \ 1.4285714285714286 = 3.428571428571429, \ 3.428571428571428571429 \ * \ 7.0 = 24.00 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \ + \ 7.0 \
2 7 7 J:
2 7 7 / 11 + *
7.0 / 7.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 7 7 Q:
2 7 + 7 - 12 *
2.0 + 7.0 = 9.0, 9.0 - 7.0 = 2.0, 2.0 * 12.0 = 24.0
2 7 7 K:
```

```
2 13 7 7 / - *
7.0 / 7.0 = 1.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 7 8 8:
27-8+8*
2.0 - 7.0 = -5.0, -5.0 + 8.0 = 3.0, 3.0 * 8.0 = 24.0
2 7 8 9:
279+*8-
7.0 + 9.0 = 16.0, 2.0 * 16.0 = 32.0, 32.0 - 8.0 = 24.0
2 7 8 10:
2 7 8 J:
27 * 11 - 8 *
2.0 * 7.0 = 14.0, 14.0 - 11.0 = 3.0, 3.0 * 8.0 = 24.0
2 7 8 Q:
2 8 7 - 12 * *
8.0 - 7.0 = 1.0, 1.0 * 12.0 = 12.0, 2.0 * 12.0 = 24.0
2 7 8 K:
2 7 8 - 13 + *
7.0 - 8.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 7 9 9:
2 7 9 10:
2 9 7 - 10 + *
9.0 - 7.0 = 2.0, 2.0 + 10.0 = 12.0, 2.0 * 12.0 = 24.0
2 7 9 J:
2 7 9 - 11 * -
7.0 - 9.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 7 9 Q:
2 7 9 K:
2 9 * 7 - 13 +
2.0 \times 9.0 = 18.0, 18.0 - 7.0 = 11.0, 11.0 + 13.0 = 24.0
2 7 10 10:
2 7 10 + * 10 -
7.0 + 10.0 = 17.0, 2.0 * 17.0 = 34.0, 34.0 - 10.0 = 24.0
2 7 10 J:
2 10 * 7 - 11 +
2.0 * 10.0 = 20.0, 20.0 - 7.0 = 13.0, 13.0 + 11.0 = 24.0
2 7 10 0:
7 10 2 / 12 + +
10.0 / 2.0 = 5.0, 5.0 + 12.0 = 17.0, 7.0 + 17.0 = 24.0
2 7 10 K:
2711:
2 7 1 0:
2 7 11 + * 12 -
7.0 + 11.0 = 18.0, 2.0 * 18.0 = 36.0, 36.0 - 12.0 = 24.0
2 7 J K:
2 7 Q Q:
2 7 * 12 - 12 *
2.0 * 7.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
2 7 Q K:
2 13 7 - * 12 +
13.0 - 7.0 = 6.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
2 7 K K:
2 8 8 8:
2 8 8 + * 8 -
8.0 + 8.0 = 16.0, 2.0 * 16.0 = 32.0, 32.0 - 8.0 = 24.0
2 8 8 9:
28-9+8*
2.0 - 8.0 = -6.0, -6.0 + 9.0 = 3.0, 3.0 * 8.0 = 24.0
2 8 8 10:
8 2 8 10 +
8.0 + 10.0 = 18.0, 2.0 - 18.0 = -16.0, 8.0 - -16.0 = 24.0
288J:
288/11+*
8.0 / 8.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 8 8 Q:
28+8-12 *
2.0 + 8.0 = 10.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
2 8 8 K:
28 * 13 - 8 *
2.0 * 8.0 = 16.0, 16.0 - 13.0 = 3.0, 3.0 * 8.0 = 24.0
2 8 9 9:
299/+8*
9.0 / 9.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
2 8 9 10:
289+ * 10 -
8.0 + 9.0 = 17.0, 2.0 * 17.0 = 34.0, 34.0 - 10.0 = 24.0
2 8 9 J:
2 9 8 - 11 + *
9.0 - 8.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 8 9 Q:
2 8 12 / + 9 *
2 8 9 K:
2 8 9 - 13 + *
8.0 - 9.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 8 10 10:
2 10 8 - 10 + *
10.0 - 8.0 = 2.0, 2.0 + 10.0 = 12.0, 2.0 * 12.0 = 24.0
```

```
2 8 10 - 11 * -
8.0 - 10.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 8 10 Q:
2 8 10 + * 12 -
8.0 + 10.0 = 18.0, 2.0 * 18.0 = 36.0, 36.0 - 12.0 = 24.0
2 8 10 K:
2 13 * 10 - 8 +
2.0 * 13.0 = 26.0, 26.0 - 10.0 = 16.0, 16.0 + 8.0 = 24.0
2811:
2 11 11 / + 8 *
11.0 / 11.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
28 J 0:
2 11 - 12 + 8 *
2.0 - 11.0 = -9.0, -9.0 + 12.0 = 3.0, 3.0 * 8.0 = 24.0
2 8 J K:
2 8 Q Q:
2 12 12 / + 8 *
12.0 / 12.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
2 8 Q K:
2 12 - 13 + 8 *
2.0 - 12.0 = -10.0, -10.0 + 13.0 = 3.0, 3.0 * 8.0 = 24.0
2 13 13 / + 8 *
13.0 / 13.0 = 1.0, 2.0 + 1.0 = 3.0, 3.0 * 8.0 = 24.0
2 9 9 10:
2 9 9 J:
2 9 9 / 11 + *
9.0 / 9.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 9 9 Q:
2 9 + 9 - 12 *
2.0 + 9.0 = 11.0, 11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0
2 9 9 K:
2 13 9 9 / - *
9.0 / 9.0 = 1.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 9 10 10:
9 10 2 / 10 + +
10.0 / 2.0 = 5.0, 5.0 + 10.0 = 15.0, 9.0 + 15.0 = 24.0
2 9 10 J:
2 10 9 - 11 + *
10.0 - 9.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 9 10 0:
2 10 - 9 12 - *
2.0 - 10.0 = -8.0, 9.0 - 12.0 = -3.0, -8.0 * -3.0 = 24.0
2 9 10 K:
2 9 10 - 13 + *
9.0 - 10.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 9 J J:
2 9 11 - 11 * -
9.0 - 11.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 9 J Q:
2 9 J K:
2 13 * 11 - 9 +
2.0 * 13.0 = 26.0, 26.0 - 11.0 = 15.0, 15.0 + 9.0 = 24.0
2 9 Q Q:
2 9 Q K:
12 2 13 9 - / /
13.0 - 9.0 = 4.0, 2.0 / 4.0 = 0.5, 12.0 / 0.5 = 24.0
2 9 K K:
9 13 + 2 / 13 +
9.0 + 13.0 = 22.0, 22.0 / 2.0 = 11.0, 11.0 + 13.0 = 24.0
2 10 10 10:
2 10 10 J:
2 10 10 / 11 + *
10.0 / 10.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 10 10 0:
2 10 + 10 - 12 *
2.0 + 10.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
2 10 10 K:
2 10 - 10 13 - *
2.0 - 10.0 = -8.0, 10.0 - 13.0 = -3.0, -8.0 * -3.0 = 24.0
2 10 J J:
2 11 10 - 11 + *
11.0 - 10.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
2 10 J 0:
2 10 12 - 11 * -
10.0 - 12.0 = -2.0, -2.0 * 11.0 = -22.0, 2.0 - -22.0 = 24.0
2 10 J K:
2 10 11 - 13 + *
10.0 - 11.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 10 Q Q:
2 10 Q K:
2 13 * 12 - 10 +
2.0 \times 13.0 = 26.0, 26.0 - 12.0 = 14.0, 14.0 + 10.0 = 24.0
2 10 K K:
2 J J J:
11.0 / 11.0 = 1.0, 1.0 + 11.0 = 12.0, 2.0 * 12.0 = 24.0
```

```
2 J J 0:
2 11 + 11 - 12 *
2.0 + 11.0 = 13.0, 13.0 - 11.0 = 2.0, 2.0 * 12.0 = 24.0
2 J J K:
2 11 11 13 - * -
11.0 - 13.0 = -2.0, 11.0 * -2.0 = -22.0, 2.0 - -22.0 = 24.0
2 J 0 0:
2 11 12 12 / + *
12.0 / 12.0 = 1.0, 11.0 + 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 J Q K:
2 11 12 - 13 + *
11.0 - 12.0 = -1.0, -1.0 + 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 J K K:
2 11 13 13 / + *
13.0 / 13.0 = 1.0, 11.0 + 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 Q Q Q:
2 12 + 12 - 12 *
2.0 + 12.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
2 Q Q K:
2 12 13 12 - * *
13.0 - 12.0 = 1.0, 12.0 * 1.0 = 12.0, 2.0 * 12.0 = 24.0
2 Q K K:
2 12 13 + 13 - *
12.0 + 13.0 = 25.0, 25.0 - 13.0 = 12.0, 2.0 * 12.0 = 24.0
2 K K K:
2 13 13 13 / - *
13.0 / 13.0 = 1.0, 13.0 - 1.0 = 12.0, 2.0 * 12.0 = 24.0
3 3 3 3:
3 3 * 3 * 3 -
3.0 \times 3.0 = 9.0, 9.0 \times 3.0 = 27.0, 27.0 - 3.0 = 24.0
3 3 3 4:
3 3 3 4 + * +
3.0 + 4.0 = 7.0, 3.0 * 7.0 = 21.0, 3.0 + 21.0 = 24.0
3 3 3 5:
3 3 * 3 5 * +
3.0 \times 3.0 = 9.0, 3.0 \times 5.0 = 15.0, 9.0 + 15.0 = 24.0
3 3 3 6:
33+36 * +
3.0 + 3.0 = 6.0, \ 3.0 * 6.0 = 18.0, \ 6.0 + 18.0 = 24.0
3 3 3 7:
3 3 3 / 7 + *
3.0 / 3.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 3 8:
3 3 + 3 - 8 *
3.0 + 3.0 = 6.0, 6.0 - 3.0 = 3.0, 3.0 * 8.0 = 24.0
3 3 3 9:
3933/-*
3.0 / 3.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 3 10:
3 3 3 10 - * -
3.0 - 10.0 = -7.0, 3.0 * -7.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 3 J:
3 11 * 3 3 * -
3.0 * 11.0 = 33.0, 3.0 * 3.0 = 9.0, 33.0 - 9.0 = 24.0
3 3 3 Q:
3 3 + 3 / 12 *
3.0 + 3.0 = 6.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
3 3 3 K:
3 3 4 4:
3 3 4 * 4 - *
3.0 \times 4.0 = 12.0, 12.0 - 4.0 = 8.0, 3.0 \times 8.0 = 24.0
3 3 4 5:
3 3 / 5 + 4 *
3.0 / 3.0 = 1.0, 1.0 + 5.0 = 6.0, 6.0 * 4.0 = 24.0
3 3 4 6:
3 3 - 4 + 6 *
3.0 - 3.0 = 0.0, 0.0 + 4.0 = 4.0, 4.0 * 6.0 = 24.0
3 3 4 7:
3 4 3 - 7 + 7
4.0 - 3.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 4 8:
3 3 + 8 4 - >
3.0 + 3.0 = 6.0, 8.0 - 4.0 = 4.0, 6.0 * 4.0 = 24.0
3 3 4 9:
3 3 4 - 9 + *
3.0 - 4.0 = -1.0, -1.0 + 9.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 4 10:
3 3 4 J:
3 3 4 11 - * -
4.0 - 11.0 = -7.0, 3.0 * -7.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 4 Q:
3 3 + 4 - 12 *
3.0 + 3.0 = 6.0, 6.0 - 4.0 = 2.0, 2.0 * 12.0 = 24.0
3 3 4 K:
3 13 4 - * 3 -
13.0 - 4.0 = 9.0, 3.0 * 9.0 = 27.0, 27.0 - 3.0 = 24.0
3 3 5 5:
55 * 33 / -
```

```
5.0 \times 5.0 = 25.0, 3.0 / 3.0 = 1.0, 25.0 - 1.0 = 24.0
3 3 5 6:
3 3 + 5 * 6 -
3.0 + 3.0 = 6.0, 6.0 * 5.0 = 30.0, 30.0 - 6.0 = 24.0
3 3 5 7:
3 3 5 * 7 - >
3.0 \times 5.0 = 15.0, 15.0 - 7.0 = 8.0, 3.0 \times 8.0 = 24.0
3 3 5 8:
3 3 5 9:
3 3 + 9 5 - *
3.0 + 3.0 = 6.0, 9.0 - 5.0 = 4.0, 6.0 * 4.0 = 24.0
3 3 5 10:
3 3 5 - 10 + *
3.0 - 5.0 = -2.0, -2.0 + 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 5 J:
3 3 5 Q:
3 3 5 12 - * -
5.0 - 12.0 = -7.0, 3.0 * -7.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 5 K:
3 3 + 5 13 + +
3.0 + 3.0 = 6.0, 5.0 + 13.0 = 18.0, 6.0 + 18.0 = 24.0
3 3 6 6:
3 6 3 / 6 + *
6.0 / 3.0 = 2.0, 2.0 + 6.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 6 7:
3 3 6 - 7 * -
3.0 - 6.0 = -3.0, -3.0 * 7.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 6 8:
3 3 * 6 - 8 *
3.0 \times 3.0 = 9.0, 9.0 - 6.0 = 3.0, 3.0 \times 8.0 = 24.0
3 3 6 9:
3 3 * 6 9 + +
3.0 \times 3.0 = 9.0, 6.0 + 9.0 = 15.0, 9.0 + 15.0 = 24.0
3 3 6 10:
3 3 6 * 10 - *
3.0 \times 6.0 = 18.0, 18.0 - 10.0 = 8.0, 3.0 \times 8.0 = 24.0
3 3 6 J:
3 3 6 - 11 + *
3.0 - 6.0 = -3.0, -3.0 + 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 6 0:
3 3 + 6 12 + +
3.0 + 3.0 = 6.0, 6.0 + 12.0 = 18.0, 6.0 + 18.0 = 24.0
3 3 6 K:
3 3 6 13 - * -
6.0 - 13.0 = -7.0, 3.0 * -7.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 7 7:
3 3 7 / + 7 *
3.0 \ / \ 7.0 = 0.42857142857142855, \ 3.0 \ + \ 0.42857142857142855 = 3.4285714285714284, \ 3.4285714285714284 \ \star \ 7.0 = 24.00 \ \star \ 0.00 \ 0.00 \ \star \ 0.00 \ 0.00 \ \star \ 0.00 \ 0.00 \ \star \ 0.00 \ 0.00 \ \star \
3 3 7 8:
3 3 * 7 8 + +
3.0 \times 3.0 = 9.0, 7.0 + 8.0 = 15.0, 9.0 + 15.0 = 24.0
3 3 7 9:
37-39-*
3.0 - 7.0 = -4.0, 3.0 - 9.0 = -6.0, -4.0 * -6.0 = 24.0
3 3 7 10:
3 3 7 J:
3 3 + 7 11 + +
3.0 + 3.0 = 6.0, 7.0 + 11.0 = 18.0, 6.0 + 18.0 = 24.0
3 3 7 Q:
3 3 7 - 12 + *
3.0 - 7.0 = -4.0, -4.0 + 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 7 K:
3 3 7 * 13 - *
3.0 \times 7.0 = 21.0, 21.0 - 13.0 = 8.0, 3.0 \times 8.0 = 24.0
3 3 8 8:
3 3 8 9:
3 3 8 + * 9 -
3.0 + 8.0 = 11.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
3 3 8 10:
33 + 810 + +
3.0 + 3.0 = 6.0, 8.0 + 10.0 = 18.0, 6.0 + 18.0 = 24.0
3 3 8 1:
3 3 8 0:
3 3 + 12 8 - *
3.0 + 3.0 = 6.0, 12.0 - 8.0 = 4.0, 6.0 * 4.0 = 24.0
3 3 8 K:
3 3 8 - 13 + *
3.0 - 8.0 = -5.0, -5.0 + 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 9 9:
3 3 + 9 9 + +
3.0 + 3.0 = 6.0, 9.0 + 9.0 = 18.0, 6.0 + 18.0 = 24.0
3 3 9 10:
3 3 10 * + 9 -
3.0 \times 10.0 = 30.0, 3.0 + 30.0 = 33.0, 33.0 - 9.0 = 24.0
3 3 9 J:
3 11 9 3 / - *
9.0 / 3.0 = 3.0, 11.0 - 3.0 = 8.0, 3.0 * 8.0 = 24.0
3 3 9 Q:
```

```
3 3 9 + * 12 -
3.0 + 9.0 = 12.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
3 3 9 K:
3 3 + 13 9 - *
3.0 + 3.0 = 6.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
3 3 10 10:
3 3 10 J:
3 3 10 0:
3 3 10 K:
3 3 / 10 13 + +
3.0 / 3.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
3 3 1 1:
3 3 J Q:
3 3 11 * + 12 -
3.0 * 11.0 = 33.0, 3.0 + 33.0 = 36.0, 36.0 - 12.0 = 24.0
3 3 J K:
3 3 11 13 + - -
11.0 + 13.0 = 24.0, 3.0 - 24.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 Q Q:
3 3 12 12 + - -
12.0 + 12.0 = 24.0, 3.0 - 24.0 = -21.0, 3.0 - -21.0 = 24.0
3 3 Q K:
3 13 * 12 3 + -
3.0 * 13.0 = 39.0, 12.0 + 3.0 = 15.0, 39.0 - 15.0 = 24.0
3 3 K K:
3 4 4 4:
3 4 + 4 * 4 -
3.0 + 4.0 = 7.0, 7.0 * 4.0 = 28.0, 28.0 - 4.0 = 24.0
3 4 4 5:
3 4 4 * 5 + +
4.0 \times 4.0 = 16.0, 16.0 + 5.0 = 21.0, 3.0 + 21.0 = 24.0
3 4 4 6:
3 4 4 / + 6 *
4.0 / 4.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 4 4 7:
3 4 4 / 7 + *
4.0 / 4.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 4 8:
34+4-8*
3.0 + 4.0 = 7.0, 7.0 - 4.0 = 3.0, 3.0 * 8.0 = 24.0
3 4 4 9:
3944/-*
4.0 / 4.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 4 10:
4 10 3 - * 4 -
10.0 - 3.0 = 7.0, 4.0 * 7.0 = 28.0, 28.0 - 4.0 = 24.0
3 4 4 J:
4 4 * 3 - 11 +
4.0 \times 4.0 = 16.0, 16.0 - 3.0 = 13.0, 13.0 + 11.0 = 24.0
3 4 4 Q:
3 4 4 / - 12 *
4.0 / 4.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 4 4 K:
3 4 + 4 13 + +
3.0 + 4.0 = 7.0, 4.0 + 13.0 = 17.0, 7.0 + 17.0 = 24.0
3 4 5 5:
3 4 - 5 5 * +
3.0 - 4.0 = -1.0, 5.0 * 5.0 = 25.0, -1.0 + 25.0 = 24.0
3 4 5 6:
3 4 - 5 + 6 *
3.0 - 4.0 = -1.0, -1.0 + 5.0 = 4.0, 4.0 * 6.0 = 24.0
3 4 5 7:
3 4 * 5 7 + +
3.0 \times 4.0 = 12.0, 5.0 + 7.0 = 12.0, 12.0 + 12.0 = 24.0
3 4 5 8:
3 5 + 4 * 8 -
3.0 + 5.0 = 8.0, 8.0 * 4.0 = 32.0, 32.0 - 8.0 = 24.0
3 4 5 9:
3 4 5 - 9 + *
4.0 - 5.0 = -1.0, -1.0 + 9.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 5 10:
3 4 * 5 / 10 *
3.0 * 4.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
3 4 5 J:
3 4 + 5 * 11 -
3.0 + 4.0 = 7.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
3 4 5 Q:
3 4 + 5 12 + +
3.0 + 4.0 = 7.0, 5.0 + 12.0 = 17.0, 7.0 + 17.0 = 24.0
3 4 5 K:
3 5 * 4 - 13 +
3.0 \times 5.0 = 15.0, 15.0 - 4.0 = 11.0, 11.0 + 13.0 = 24.0
3 4 6 6:
3 4 6 + * 6 -
4.0 + 6.0 = 10.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
3 4 6 7:
3 4 6 8:
3 4 8 6 - * *
```

```
8.0 - 6.0 = 2.0, 4.0 \times 2.0 = 8.0, 3.0 \times 8.0 = 24.0
3 4 6 9:
36-9+4*
3.0 - 6.0 = -3.0, -3.0 + 9.0 = 6.0, 6.0 * 4.0 = 24.0
3 4 6 10:
3 4 6 - 10 + *
4.0 - 6.0 = -2.0, -2.0 + 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 6 1:
3 4 + 6 11 + +
3.0 + 4.0 = 7.0, 6.0 + 11.0 = 17.0, 7.0 + 17.0 = 24.0
3 4 6 0:
3 4 * 6 / 12 *
3.0 * 4.0 = 12.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
3 4 6 K:
3 13 + 6 * 4 /
3.0 + 13.0 = 16.0, 16.0 * 6.0 = 96.0, 96.0 / 4.0 = 24.0
3 4 7 7:
3 4 7 - 7 * -
4.0 - 7.0 = -3.0, -3.0 * 7.0 = -21.0, 3.0 - -21.0 = 24.0
3 4 7 8:
4 7 3 - * 8 +
7.0 - 3.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
3 4 7 9:
3 4 7 + * 9 -
4.0 + 7.0 = 11.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
3 4 7 10:
3 4 + 7 10 + +
3.0 + 4.0 = 7.0, 7.0 + 10.0 = 17.0, 7.0 + 17.0 = 24.0
3 4 7 J:
3 4 7 - 11 + *
4.0 - 7.0 = -3.0, -3.0 + 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 7 Q:
3 7 4 / 12 * +
7.0 / 4.0 = 1.75, 1.75 * 12.0 = 21.0, 3.0 + 21.0 = 24.0
3 4 7 K:
3 4 8 8:
3 4 8 9:
34+89++
3.0 + 4.0 = 7.0, 8.0 + 9.0 = 17.0, 7.0 + 17.0 = 24.0
3 4 8 10:
3 4 10 8 - * *
10.0 - 8.0 = 2.0, 4.0 * 2.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 8 J:
3 4 8 * + 11 -
4.0 \times 8.0 = 32.0, 3.0 + 32.0 = 35.0, 35.0 - 11.0 = 24.0
3 4 8 Q:
3 4 8 + * 12 -
4.0 + 8.0 = 12.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
3 4 8 K:
8 3 13 4 - / /
3 4 9 9:
3 9 4 - * 9 +
9.0 - 4.0 = 5.0, 3.0 * 5.0 = 15.0, 15.0 + 9.0 = 24.0
3 4 9 10:
3 4 9 J:
3 4 11 9 - * *
11.0 - 9.0 = 2.0, 4.0 * 2.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 9 Q:
3 4 12 / - 9 *
3 4 9 K:
3 4 9 - 13 + *
4.0 - 9.0 = -5.0, -5.0 + 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 10 10:
3 10 * 4 + 10 -
3.0 \times 10.0 = 30.0, 30.0 + 4.0 = 34.0, 34.0 - 10.0 = 24.0
3 4 10 J:
3 4 10 0:
3 4 * 10 - 12 *
3.0 \times 4.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 \times 12.0 = 24.0
3 4 10 K:
3 10 - 13 + 4 *
3.0 - 10.0 = -7.0, -7.0 + 13.0 = 6.0, 6.0 * 4.0 = 24.0
3 4 J J:
3 4 J 0:
3 11 12 4 / - *
12.0 / 4.0 = 3.0, 11.0 - 3.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 J K:
3 4 13 11
13.0 - 11.0 = 2.0, 4.0 * 2.0 = 8.0, 3.0 * 8.0 = 24.0
3 4 Q Q:
4 3 - 12 12 + *
4.0 - 3.0 = 1.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
3 4 Q K:
3 4 12 13 +
12.0 + 13.0 = 25.0, 4.0 - 25.0 = -21.0, 3.0 - -21.0 = 24.0
```

```
3 5 5 5:
3 5 5 6:
355+*6-
5.0 + 5.0 = 10.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
3 5 5 7:
355/7+
5.0 / 5.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 5 8:
35+5-8*
3.0 + 5.0 = 8.0, 8.0 - 5.0 = 3.0, 3.0 * 8.0 = 24.0
3 5 5 9:
395/+5*
9.0 / 5.0 = 1.8, 3.0 + 1.8 = 4.8, 4.8 * 5.0 = 24.0
3 5 5 10:
3 5 5 J:
3 5 + 5 11 + +
3.0 + 5.0 = 8.0, 5.0 + 11.0 = 16.0, 8.0 + 16.0 = 24.0
3 5 5 Q:
3 5 5 / - 12 *
5.0 / 5.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 5 5 K:
3 5 6 6:
3.0 - 5.0 = -2.0, -2.0 + 6.0 = 4.0, 4.0 * 6.0 = 24.0
3 5 6 7:
3 6 5 - 7 + *
6.0 - 5.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 6 8:
365-8**
6.0 - 5.0 = 1.0, 1.0 * 8.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 6 9:
3 5 6 + * 9 -
5.0 + 6.0 = 11.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
3 5 6 10:
3 5 + 6 10 + +
3.0 + 5.0 = 8.0, 6.0 + 10.0 = 16.0, 8.0 + 16.0 = 24.0
3 5 6 J:
35 * 11 - 6 *
3.0 \times 5.0 = 15.0, 15.0 - 11.0 = 4.0, 4.0 \times 6.0 = 24.0
3 5 6 0:
3 5 + 6 - 12 *
3.0 + 5.0 = 8.0, 8.0 - 6.0 = 2.0, 2.0 * 12.0 = 24.0
3 5 6 K:
3 6 - 5 13 - *
3.0 - 6.0 = -3.0, 5.0 - 13.0 = -8.0, -3.0 * -8.0 = 24.0
3 5 7 7:
3 5 7 8:
3 5 8 - 7 * -
5.0 - 8.0 = -3.0, -3.0 * 7.0 = -21.0, 3.0 - -21.0 = 24.0
3 5 7 9:
3 5 + 7 9 + +
3.0 + 5.0 = 8.0, 7.0 + 9.0 = 16.0, 8.0 + 16.0 = 24.0
3 5 7 10:
3 5 7 - 10 + *
5.0 - 7.0 = -2.0, -2.0 + 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 7 J:
3 7 - 5 11 - *
3.0 - 7.0 = -4.0, 5.0 - 11.0 = -6.0, -4.0 * -6.0 = 24.0
3 5 7 Q:
3 5 7 + * 12 -
5.0 + 7.0 = 12.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
3 5 7 K:
5 13 * 7 + 3 /
5.0 \times 13.0 = 65.0, 65.0 + 7.0 = 72.0, 72.0 / 3.0 = 24.0
3 5 8 8:
35+88++
3.0 + 5.0 = 8.0, 8.0 + 8.0 = 16.0, 8.0 + 16.0 = 24.0
3 5 8 9:
39 * 8 - 5 +
3.0 * 9.0 = 27.0, 27.0 - 8.0 = 19.0, 19.0 + 5.0 = 24.0
3 5 8 10:
3 5 8 J:
3 5 8 - 11 + *
5.0 - 8.0 = -3.0, -3.0 + 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 8 0:
3 5 * 12 - 8 *
3.0 * 5.0 = 15.0, 15.0 - 12.0 = 3.0, 3.0 * 8.0 = 24.0
3 5 8 K:
5 8 * 3 13 + -
5.0 * 8.0 = 40.0, 3.0 + 13.0 = 16.0, 40.0 - 16.0 = 24.0
3 5 9 9:
39-59-*
3.0 - 9.0 = -6.0, 5.0 - 9.0 = -4.0, -6.0 * -4.0 = 24.0
3 5 9 10:
3 9 + 5 / 10 *
3.0 + 9.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
3 5 9 J:
3 5 9 Q:
```

```
3 5 9 - 12 + *
5.0 - 9.0 = -4.0, -4.0 + 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 9 K:
3 9 13 * + 5 /
9.0 \times 13.0 = 117.0, 3.0 + 117.0 = 120.0, 120.0 / 5.0 = 24.0
3 5 10 10:
3 10 10 5 / - *
10.0 / 5.0 = 2.0, 10.0 - 2.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 10 J:
3.10 * 5 + 11 -
3.0 \times 10.0 = 30.0, 30.0 + 5.0 = 35.0, 35.0 - 11.0 = 24.0
3 5 10 0:
5 3 10 12 + -
10.0 + 12.0 = 22.0, 3.0 - 22.0 = -19.0, 5.0 - -19.0 = 24.0
3 5 10 K:
3 5 10 - 13 + *
5.0 - 10.0 = -5.0, -5.0 + 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 5 J J:
5 3 11 11 + -
11.0 + 11.0 = 22.0, 3.0 - 22.0 = -19.0, 5.0 - -19.0 = 24.0
3 5 J Q:
11.5 - 3 / 12 *
11.0 - 5.0 = 6.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
3 5 J K:
3 5 Q Q:
5 12 * 3 12 * -
5.0 \times 12.0 = 60.0, 3.0 \times 12.0 = 36.0, 60.0 - 36.0 = 24.0
3 5 Q K:
3 5 * 13 - 12 *
3.0 \times 5.0 = 15.0, 15.0 - 13.0 = 2.0, 2.0 \times 12.0 = 24.0
3 5 K K:
3 5 13 13 + - -
13.0 + 13.0 = 26.0, 5.0 - 26.0 = -21.0, 3.0 - -21.0 = 24.0
3 6 6 6:
366/+6*
6.0 / 6.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 6 7:
366/7+*
6.0 / 6.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 6 8:
36+6-8*
3.0 + 6.0 = 9.0, 9.0 - 6.0 = 3.0, 3.0 * 8.0 = 24.0
3 6 6 9:
36+69++
3.0 + 6.0 = 9.0, 6.0 + 9.0 = 15.0, 9.0 + 15.0 = 24.0
3 6 6 10:
6 3 - 10 * 6 -
6.0 - 3.0 = 3.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
3 6 6 J:
6 6 11 * + 3 /
6.0 \times 11.0 = 66.0, 6.0 + 66.0 = 72.0, 72.0 / 3.0 = 24.0
3 6 6 Q:
3 6 6 + * 12 -
6.0 + 6.0 = 12.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
6 13 6 3 + - *
6.0 + 3.0 = 9.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
3 6 7 7:
3 7 6 - 7 +
7.0 - 6.0 = 1.0, 1.0 + 7.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 7 8:
3 6 + 7 8 + +
3.0 + 6.0 = 9.0, 7.0 + 8.0 = 15.0, 9.0 + 15.0 = 24.0
3 6 7 9:
3 6 7 - 9 + *
6.0 - 7.0 = -1.0, -1.0 + 9.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 7 10:
6 3 / 7 * 10 +
6.0 / 3.0 = 2.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
367.1:
3 6 7 0:
3 6 + 7 - 12 *
3.0 + 6.0 = 9.0, 9.0 - 7.0 = 2.0, 2.0 * 12.0 = 24.0
3 6 7 K:
36 * 7 - 13 +
3.0 * 6.0 = 18.0, 18.0 - 7.0 = 11.0, 11.0 + 13.0 = 24.0
3 6 8 8:
388/+6*
8.0 / 8.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 8 9:
38-9+6*
3.0 - 8.0 = -5.0, -5.0 + 9.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 8 10:
3 6 8 - 10 + *
6.0 - 8.0 = -2.0, -2.0 + 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 8 J:
3 6 8 Q:
6 8 12 3 / - *
```

```
12.0 / 3.0 = 4.0, 8.0 - 4.0 = 4.0, 6.0 * 4.0 = 24.0
3 6 8 K:
6 3 8 13 + -
8.0 + 13.0 = 21.0, 3.0 - 21.0 = -18.0, 6.0 - -18.0 = 24.0
3 6 9 9:
39 * 6 + 9 -
3.0 \times 9.0 = 27.0, 27.0 + 6.0 = 33.0, 33.0 - 9.0 = 24.0
3 6 9 10:
3 9 - 6 10 - *
3.0 - 9.0 = -6.0, 6.0 - 10.0 = -4.0, -6.0 * -4.0 = 24.0
3 6 9 J:
3 6 9 - 11 + *
6.0 - 9.0 = -3.0, -3.0 + 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 9 Q:
36 * 9 / 12 *
3.0 * 6.0 = 18.0, 18.0 / 9.0 = 2.0, 2.0 * 12.0 = 24.0
3 6 9 K:
3 13 + 9 * 6 /
3.0 + 13.0 = 16.0, 16.0 * 9.0 = 144.0, 144.0 / 6.0 = 24.0
3 6 10 10:
3 6 10 / - 10 *
6.0 / 10.0 = 0.6, 3.0 - 0.6 = 2.4, 2.4 * 10.0 = 24.0
3 6 10 J:
3 10 - 11 + 6 *
3.0 - 10.0 = -7.0, -7.0 + 11.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 10 Q:
3 6 10 - 12 + *
6.0 - 10.0 = -4.0, -4.0 + 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 10 K:
3 6 J J:
3 11 11 / + 6 *
11.0 / 11.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 J 0:
3 11 - 12 + 6 *
3.0 - 11.0 = -8.0, -8.0 + 12.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 1 K:
3 6 11 - 13 + *
6.0 - 11.0 = -5.0, -5.0 + 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 6 0 0:
3 12 12 / + 6 *
12.0 / 12.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 0 K:
3 12 - 13 + 6 *
3.0 - 12.0 = -9.0, -9.0 + 13.0 = 4.0, 4.0 * 6.0 = 24.0
3 6 K K:
3 13 13 / + 6 *
13.0 / 13.0 = 1.0, 3.0 + 1.0 = 4.0, 4.0 * 6.0 = 24.0
3 7 7 7:
3 7 + 7 7 +
3.0 + 7.0 = 10.0, 7.0 + 7.0 = 14.0, 10.0 + 14.0 = 24.0
3 7 7 8:
3 7 + 7 - 8 *
3.0 + 7.0 = 10.0, 10.0 - 7.0 = 3.0, 3.0 * 8.0 = 24.0
3 7 7 9:
3977/-
7.0 / 7.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 7 10:
3 7 7 10 - * -
7.0 - 10.0 = -3.0, 7.0 * -3.0 = -21.0, 3.0 - -21.0 = 24.0
3 7 7 J:
3 7 7 Q:
3 7 7 / - 12 *
7.0 / 7.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 7 7 K:
3 7 - 7 13 - *
3.0 - 7.0 = -4.0, 7.0 - 13.0 = -6.0, -4.0 * -6.0 = 24.0
3 7 8 8:
3788/+*
8.0 / 8.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 8 9:
3 7 8 - 9 + *
7.0 - 8.0 = -1.0, -1.0 + 9.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 8 10:
3 7 8 J:
3 7 8 11 - * -
8.0 - 11.0 = -3.0, 7.0 * -3.0 = -21.0, 3.0 - -21.0 = 24.0
3 7 8 Q:
3 7 + 8 - 12 *
3.0 + 7.0 = 10.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
3 7 8 K:
3 13 * 8 7 + -
3.0 \times 13.0 = 39.0, 8.0 + 7.0 = 15.0, 39.0 - 15.0 = 24.0
3 7 9 9:
3 7 9 9 / + *
9.0 / 9.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 9 10:
3 7 9 - 10 + *
7.0 - 9.0 = -2.0, -2.0 + 10.0 = 8.0, 3.0 * 8.0 = 24.0
```

```
3 7 9 ]:
3 9 - 7 11 - *
3.0 - 9.0 = -6.0, 7.0 - 11.0 = -4.0, -6.0 * -4.0 = 24.0
3 7 9 Q:
3 7 9 12 - * -
9.0 - 12.0 = -3.0, 7.0 * -3.0 = -21.0, 3.0 - -21.0 = 24.0
3 7 9 K:
7 9 * 3 13 * -
7.0 \times 9.0 = 63.0, 3.0 \times 13.0 = 39.0, 63.0 - 39.0 = 24.0
3 7 10 10:
3 7 10 10 / + *
10.0 / 10.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 10 J:
3 7 10 - 11 + *
7.0 - 10.0 = -3.0, -3.0 + 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 10 Q:
3 7 10 K:
3 7 10 13 - * -
10.0 - 13.0 = -3.0, 7.0 * -3.0 = -21.0, 3.0 - -21.0 = 24.0
3 7 J J:
3 7 11 11 / + *
11.0 / 11.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 J Q:
3 7 11 - 12 + *
7.0 - 11.0 = -4.0, -4.0 + 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 J K:
3 7 Q Q:
3 7 12 12 / + *
12.0 / 12.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 Q K:
3 7 12 - 13 + *
7.0 - 12.0 = -5.0, -5.0 + 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 7 K K:
3 7 13 13 / + *
13.0 / 13.0 = 1.0, 7.0 + 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 8 8:
38+8-8*
3.0 + 8.0 = 11.0, 11.0 - 8.0 = 3.0, 3.0 * 8.0 = 24.0
3 8 8 9:
3898 - * *
9.0 - 8.0 = 1.0, 8.0 * 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 8 10:
8 10 * 8 - 3 /
8.0 \times 10.0 = 80.0, 80.0 - 8.0 = 72.0, 72.0 / 3.0 = 24.0
3 8 8 J:
8 3 8 11 + -
8.0 + 11.0 = 19.0, 3.0 - 19.0 = -16.0, 8.0 - -16.0 = 24.0
3 8 8 Q:
3 8 8 / - 12 *
8.0 / 8.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 8 8 K:
3 8 9 9:
3 8 9 + 9 - *
8.0 + 9.0 = 17.0, 17.0 - 9.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 9 10:
3 8 10 9 - * *
10.0 - 9.0 = 1.0, 8.0 * 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 9 J:
3 9 * 8 + 11 -
3.0 \times 9.0 = 27.0, 27.0 + 8.0 = 35.0, 35.0 - 11.0 = 24.0
3 8 9 Q:
3 8 + 9 - 12 *
3.0 + 8.0 = 11.0, 11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0
3 8 9 K:
3 13 8 - * 9 +
13.0 - 8.0 = 5.0, 3.0 * 5.0 = 15.0, 15.0 + 9.0 = 24.0
3 8 10 10:
3 8 10 + 10 - *
8.0 + 10.0 = 18.0, 18.0 - 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 10 J:
3 8 11 10 - * *
11.0 - 10.0 = 1.0, 8.0 * 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 10 0:
10 8 3 - / 12 *
8.0 - 3.0 = 5.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
3 8 10 K:
38JJ:
3 8 11 + 11 - *
8.0 + 11.0 = 19.0, 19.0 - 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 J Q:
3 8 12 11 - * *
12.0 - 11.0 = 1.0, 8.0 * 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 J K:
3 8 Q Q:
3 8 12 + 12 - *
8.0 + 12.0 = 20.0, 20.0 - 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 Q K:
3 8 13 12 - * *
```

```
13.0 - 12.0 = 1.0, 8.0 * 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 8 K K:
3 8 13 + 13 - *
8.0 + 13.0 = 21.0, 21.0 - 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 9 9:
3999/-
9.0 / 9.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 9 10:
3 9 9 + 10 - *
9.0 + 9.0 = 18.0, 18.0 - 10.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 9 J:
3 9 + 11 9 - *
3.0 + 9.0 = 12.0, 11.0 - 9.0 = 2.0, 12.0 * 2.0 = 24.0
3 9 9 Q:
3 9 * 9 + 12 -
3.0 * 9.0 = 27.0, 27.0 + 9.0 = 36.0, 36.0 - 12.0 = 24.0
3 9 9 K:
3 9 - 9 13 - 7
3.0 - 9.0 = -6.0, 9.0 - 13.0 = -4.0, -6.0 * -4.0 = 24.0
3 9 10 10:
3 9 10 10 / - *
10.0 / 10.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 10 J:
3 9 10 + 11 - *
9.0 + 10.0 = 19.0, 19.0 - 11.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 10 Q:
3 9 + 10 - 12 *
3.0 + 9.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
3 9 10 K:
3 9 * 10 + 13 -
3.0 \times 9.0 = 27.0, 27.0 + 10.0 = 37.0, 37.0 - 13.0 = 24.0
3 9 J J:
3 9 11 / - 11 *
9.0 \ / \ 11.0 = 0.818181818181818182, \ 3.0 \ - \ 0.8181818181818182 = 2.1818181818181817, \ 2.181818181818181817 \ \star \ 11.0 = 24.0 \ \star \ 1.0 = 24.0 \ \star \ 1
3 9 J 0:
3 9 11 + 12 - *
9.0 + 11.0 = 20.0, 20.0 - 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 J K:
3 9 + 13 11 - *
3.0 + 9.0 = 12.0, 13.0 - 11.0 = 2.0, 12.0 * 2.0 = 24.0
3 9 Q Q:
3 9 12 12 / - *
12.0 / 12.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 0 K:
3 9 12 + 13 - *
9.0 + 12.0 = 21.0, 21.0 - 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 9 K K:
3 9 13 13 / - *
13.0 / 13.0 = 1.0, 9.0 - 1.0 = 8.0, 3.0 * 8.0 = 24.0
3 10 10 10:
3 10 10 J:
3 10 10 Q:
3 10 10 + 12 - *
10.0 + 10.0 = 20.0, 20.0 - 12.0 = 8.0, 3.0 * 8.0 = 24.0
3 10 10 K:
3 10 J J:
3 10 J Q:
3 10 + 11 - 12 *
3.0 + 10.0 = 13.0, 13.0 - 11.0 = 2.0, 2.0 * 12.0 = 24.0
3 10 J K:
3 10 11 + 13 - *
10.0 + 11.0 = 21.0, 21.0 - 13.0 = 8.0, 3.0 * 8.0 = 24.0
3 10 Q Q:
3 10 Q K:
3 10 K K:
3 J J J:
3 J J 0:
3 11 11 / - 12 *
11.0 / 11.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 J J K:
3 J 0 0:
3 11 + 12 - 12 *
3.0 + 11.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
3 J Q K:
3 J K K:
3 Q Q Q:
3 12 12 / - 12 *
12.0 / 12.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 Q Q K:
3 12 + 13 - 12 *
3.0 + 12.0 = 15.0, 15.0 - 13.0 = 2.0, 2.0 * 12.0 = 24.0
3 Q K K:
3 13 13 / - 12 *
13.0 / 13.0 = 1.0, 3.0 - 1.0 = 2.0, 2.0 * 12.0 = 24.0
3 K K K:
4 4 4 4:
44+44*+
4.0 + 4.0 = 8.0, 4.0 * 4.0 = 16.0, 8.0 + 16.0 = 24.0
```

```
4 4 4 5:
444/5+*
4.0 / 4.0 = 1.0, 1.0 + 5.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 4 6:
44+4-6*
4.0 + 4.0 = 8.0, 8.0 - 4.0 = 4.0, 4.0 * 6.0 = 24.0
4 4 4 7:
44+74->
4.0 + 4.0 = 8.0, 7.0 - 4.0 = 3.0, 8.0 * 3.0 = 24.0
4 4 4 8:
4 4 + 4 * 8 -
4.0 + 4.0 = 8.0, 8.0 * 4.0 = 32.0, 32.0 - 8.0 = 24.0
4 4 4 9:
4449-*
4.0 - 9.0 = -5.0, 4.0 * -5.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 4 10:
4 4 4 * 10 - *
4.0 \times 4.0 = 16.0, 16.0 - 10.0 = 6.0, 4.0 \times 6.0 = 24.0
4 4 4 J:
4 11 4 - * 4 -
11.0 - 4.0 = 7.0, 4.0 * 7.0 = 28.0, 28.0 - 4.0 = 24.0
4 4 4 Q:
4 4 + 4 12 + +
4.0 + 4.0 = 8.0, 4.0 + 12.0 = 16.0, 8.0 + 16.0 = 24.0
4 4 4 K:
4 4 5 5:
4 4 5 / + 5 *
4.0 / 5.0 = 0.8, 4.0 + 0.8 = 4.8, 4.8 * 5.0 = 24.0
4 4 5 6:
454-6**
5.0 - 4.0 = 1.0, 1.0 * 6.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 5 7:
4 4 5 - 7 + *
4.0 - 5.0 = -1.0, -1.0 + 7.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 5 8:
44+5-8*
4.0 + 4.0 = 8.0, 8.0 - 5.0 = 3.0, 3.0 * 8.0 = 24.0
4 4 5 9:
4 4 5 10:
4 4 5 10 - * -
5.0 - 10.0 = -5.0, 4.0 * -5.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 5 J:
4 4 + 5 11 + +
4.0 + 4.0 = 8.0, 5.0 + 11.0 = 16.0, 8.0 + 16.0 = 24.0
4 4 5 Q:
4 4 5 + * 12 -
4.0 + 5.0 = 9.0, 4.0 * 9.0 = 36.0, 36.0 - 12.0 = 24.0
4 4 5 K:
4 4 * 5 - 13 +
4.0 * 4.0 = 16.0, 16.0 - 5.0 = 11.0, 11.0 + 13.0 = 24.0
4 4 6 6:
4 4 6 7:
4 4 6 8:
4 4 6 - 8 + *
4.0 - 6.0 = -2.0, -2.0 + 8.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 6 9:
44 * 6 / 9 *
4 4 6 10:
4 4 + 6 10 + +
4.0 + 4.0 = 8.0, 6.0 + 10.0 = 16.0, 8.0 + 16.0 = 24.0
4 4 6 J:
4 4 6 11 - *
6.0 - 11.0 = -5.0, 4.0 * -5.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 6 0:
4 4 + 6 - 12 *
4.0 + 4.0 = 8.0, 8.0 - 6.0 = 2.0, 2.0 * 12.0 = 24.0
4 4 6 K:
4 13 6 - * 4 -
13.0 - 6.0 = 7.0, 4.0 * 7.0 = 28.0, 28.0 - 4.0 = 24.0
4477.
447/-7*
4.0 / 7.0 = 0.5714285714285714, 4.0 - 0.5714285714285714 = 3.428571428571429, 3.428571428571429 * 7.0 = 24.0
4 4 7 8:
4 4 7 * + 8 -
4.0 * 7.0 = 28.0, 4.0 + 28.0 = 32.0, 32.0 - 8.0 = 24.0
4 4 7 9:
44+79++
4.0 + 4.0 = 8.0, 7.0 + 9.0 = 16.0, 8.0 + 16.0 = 24.0
4 4 7 10:
4 4 + 10 7 - *
4.0 + 4.0 = 8.0, 10.0 - 7.0 = 3.0, 8.0 * 3.0 = 24.0
4 4 7 J:
4 4 7 Q:
4 4 7 12 - * -
7.0 - 12.0 = -5.0, 4.0 * -5.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 7 K:
4 13 * 7 4 * -
```

```
4.0 * 13.0 = 52.0, 7.0 * 4.0 = 28.0, 52.0 - 28.0 = 24.0
4 4 8 8:
4 4 + 8 8 + +
4.0 + 4.0 = 8.0, 8.0 + 8.0 = 16.0, 8.0 + 16.0 = 24.0
4 4 8 9:
49 * 84 +
4.0 \times 9.0 = 36.0, 8.0 + 4.0 = 12.0, 36.0 - 12.0 = 24.0
4 4 8 10:
4 4 8 - 10 + *
4.0 - 8.0 = -4.0, -4.0 + 10.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 8 1:
4 4 + 11 8 - *
4.0 + 4.0 = 8.0, 11.0 - 8.0 = 3.0, 8.0 * 3.0 = 24.0
4 4 8 0:
4 4 8 * + 12 -
4.0 \times 8.0 = 32.0, 4.0 + 32.0 = 36.0, 36.0 - 12.0 = 24.0
4 4 8 K:
4 4 8 13 - * -
8.0 - 13.0 = -5.0, 4.0 * -5.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 9 9:
4 4 9 10:
4 4 9 J:
4 4 9 - 11 + *
4.0 - 9.0 = -5.0, -5.0 + 11.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 9 Q:
4 4 + 12 9 - *
4.0 + 4.0 = 8.0, 12.0 - 9.0 = 3.0, 8.0 * 3.0 = 24.0
4 4 9 K:
4 4 10 10:
10 10 * 4 - 4 /
10.0 \times 10.0 = 100.0, 100.0 - 4.0 = 96.0, 96.0 / 4.0 = 24.0
4 4 10 J:
4 4 10 Q:
4 4 10 - 12 + *
4.0 - 10.0 = -6.0, -6.0 + 12.0 = 6.0, 4.0 * 6.0 = 24.0
4 4 10 K:
4 4 / 10 13 + +
4.0 / 4.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
4 4 1 1:
44 10:
4 4 / 11 12 + +
4.0 / 4.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
4 4 J K:
4 4 11 13 + - -
11.0 + 13.0 = 24.0, 4.0 - 24.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 0 0:
4 4 12 12 + - -
12.0 + 12.0 = 24.0, 4.0 - 24.0 = -20.0, 4.0 - -20.0 = 24.0
4 4 Q K:
4 13 4 - * 12 -
13.0 - 4.0 = 9.0, 4.0 * 9.0 = 36.0, 36.0 - 12.0 = 24.0
4 4 K K:
4 5 5 5:
4 5 - 5 5 * +
4.0 - 5.0 = -1.0, 5.0 * 5.0 = 25.0, -1.0 + 25.0 = 24.0
4 5 5 6:
4 5 + 5 - 6 *
4.0 + 5.0 = 9.0, 9.0 - 5.0 = 4.0, 4.0 * 6.0 = 24.0
4 5 5 7:
4755/-*
5.0 / 5.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 5 8:
455/-8*
5.0 / 5.0 = 1.0, 4.0 - 1.0 = 3.0, 3.0 * 8.0 = 24.0
4 5 5 9:
4559-*
5.0 - 9.0 = -4.0, 5.0 * -4.0 = -20.0, 4.0 - -20.0 = 24.0
4 5 5 10:
4 5 + 5 10 + +
4.0 + 5.0 = 9.0, 5.0 + 10.0 = 15.0, 9.0 + 15.0 = 24.0
455 ]:
4 5 5 0:
4 5 5 K:
4 5 6 6:
4566/+*
6.0 / 6.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 6 7:
4 5 6 - 7 + *
5.0 - 6.0 = -1.0, -1.0 + 7.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 6 8:
4 5 + 6 - 8 *
4.0 + 5.0 = 9.0, 9.0 - 6.0 = 3.0, 3.0 * 8.0 = 24.0
4 5 6 9:
45+69++
4.0 + 5.0 = 9.0, 6.0 + 9.0 = 15.0, 9.0 + 15.0 = 24.0
4 5 6 10:
6.0 - 10.0 = -4.0, 5.0 * -4.0 = -20.0, 4.0 - -20.0 = 24.0
```

```
4 5 6 J:
5 11 + 6 * 4 /
5.0 + 11.0 = 16.0, 16.0 * 6.0 = 96.0, 96.0 / 4.0 = 24.0
4 5 6 0:
46+5/12*
4.0 + 6.0 = 10.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
4 5 6 K:
6 13 4 5 + - *
4.0 + 5.0 = 9.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
4 5 7 7:
4577/+*
7.0 / 7.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 7 8:
45+78++
4.0 + 5.0 = 9.0, 7.0 + 8.0 = 15.0, 9.0 + 15.0 = 24.0
4 5 7 9:
4 7 * 5 + 9 -
4.0 \times 7.0 = 28.0, 28.0 + 5.0 = 33.0, 33.0 - 9.0 = 24.0
4 5 7 10:
4 5 7 - 10 * -
5.0 - 7.0 = -2.0, -2.0 * 10.0 = -20.0, 4.0 - -20.0 = 24.0
4 5 7 J:
4 5 7 11 - * -
7.0 - 11.0 = -4.0, 5.0 * -4.0 = -20.0, 4.0 - -20.0 = 24.0
4 5 7 Q:
4 5 + 7 - 12 *
4.0 + 5.0 = 9.0, 9.0 - 7.0 = 2.0, 2.0 * 12.0 = 24.0
4 5 7 K:
4 7 - 5 13 - *
4.0 - 7.0 = -3.0, 5.0 - 13.0 = -8.0, -3.0 * -8.0 = 24.0
4 5 8 8:
4 5 8 8 / + *
8.0 / 8.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4589:
458-9+*
5.0 - 8.0 = -3.0, -3.0 + 9.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 8 10:
4 8 + 5 / 10 *
4.0 + 8.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
458]:
48-511-*
4.0 - 8.0 = -4.0, 5.0 - 11.0 = -6.0, -4.0 * -6.0 = 24.0
4 5 8 Q:
4 5 8 12 - * -
8.0 - 12.0 = -4.0, 5.0 * -4.0 = -20.0, 4.0 - -20.0 = 24.0
4 5 8 K:
48 * 5 + 13 -
4.0 \times 8.0 = 32.0, 32.0 + 5.0 = 37.0, 37.0 - 13.0 = 24.0
4 5 9 9:
4599/+*
9.0 / 9.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 9 10:
4 5 9 - 10 + *
5.0 - 9.0 = -4.0, -4.0 + 10.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 9 J:
4 5 9 Q:
5 4 / 12 * 9 +
5.0 / 4.0 = 1.25, 1.25 * 12.0 = 15.0, 15.0 + 9.0 = 24.0
4 5 9 K:
4 5 9 13 - * -
9.0 - 13.0 = -4.0, 5.0 * -4.0 = -20.0, 4.0 - -20.0 = 24.0
4 5 10 10:
4 5 10 10 / + *
10.0 / 10.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 10 J:
4 5 10 - 11 + *
5.0 - 10.0 = -5.0, -5.0 + 11.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 10 0:
45 * 10 / 12 *
4.0 * 5.0 = 20.0, 20.0 / 10.0 = 2.0, 2.0 * 12.0 = 24.0
4 5 10 K:
5 4 10 13 + -
10.0 + 13.0 = 23.0, 4.0 - 23.0 = -19.0, 5.0 - -19.0 = 24.0
4 5 J J:
4 5 11 11 / + *
11.0 / 11.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 J Q:
4 5 11 - 12 + *
5.0 - 11.0 = -6.0, -6.0 + 12.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 J K:
5 4 - 11 13 + *
5.0 - 4.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
4 5 Q Q:
4 5 12 12 / + *
12.0 / 12.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 5 Q K:
4 5 12 13 + - -
12.0 + 13.0 = 25.0, 5.0 - 25.0 = -20.0, 4.0 - -20.0 = 24.0
```

```
4 5 K K:
4 5 13 13 / + *
13.0 / 13.0 = 1.0, 5.0 + 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 6 6:
46+6-6*
4.0 + 6.0 = 10.0, 10.0 - 6.0 = 4.0, 4.0 * 6.0 = 24.0
4 6 6 7:
4676-*
7.0 - 6.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 6 8:
46+68++
4.0 + 6.0 = 10.0, 6.0 + 8.0 = 14.0, 10.0 + 14.0 = 24.0
4 6 6 9:
49 * 66 + -
4.0 * 9.0 = 36.0, 6.0 + 6.0 = 12.0, 36.0 - 12.0 = 24.0
4 6 6 10:
6 4 6 10 + / /
6.0 + 10.0 = 16.0, 4.0 / 16.0 = 0.25, 6.0 / 0.25 = 24.0
4 6 6 J:
4 6 6 Q:
6 4 - 6 * 12 +
6.0 - 4.0 = 2.0, 2.0 * 6.0 = 12.0, 12.0 + 12.0 = 24.0
4 6 6 K:
4 6 7 7:
4 6 + 7 7 + +
4.0 + 6.0 = 10.0, 7.0 + 7.0 = 14.0, 10.0 + 14.0 = 24.0
4 6 7 8:
4 6 + 7 - 8 *
4.0 + 6.0 = 10.0, 10.0 - 7.0 = 3.0, 3.0 * 8.0 = 24.0
4 6 7 9:
6 4 7 9 + / /
7.0 + 9.0 = 16.0, 4.0 / 16.0 = 0.25, 6.0 / 0.25 = 24.0
4 6 7 10:
4 7 * 6 + 10 -
4.0 \times 7.0 = 28.0, 28.0 + 6.0 = 34.0, 34.0 - 10.0 = 24.0
4 6 7 J:
4 6 7 Q:
6 7 4 - / 12 *
7.0 - 4.0 = 3.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
4 6 7 K:
4 6 8 8:
468+8-*
6.0 + 8.0 = 14.0, 14.0 - 8.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 8 9:
4698-*
9.0 - 8.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 8 10:
4 6 8 - 10 * -
6.0 - 8.0 = -2.0, -2.0 * 10.0 = -20.0, 4.0 - -20.0 = 24.0
4 6 8 J:
4 6 8 Q:
4 6 + 8 - 12 *
4.0 + 6.0 = 10.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
4 6 8 K:
8 13 4 6 + - *
4.0 + 6.0 = 10.0, 13.0 - 10.0 = 3.0, 8.0 * 3.0 = 24.0
4 6 9 9:
4 6 9 + 9 - *
6.0 + 9.0 = 15.0, 15.0 - 9.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 9 10:
4 6 10 9 - * *
10.0 - 9.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 9 J:
4 6 9 Q:
4 9 6 - * 12 +
9.0 - 6.0 = 3.0, 4.0 * 3.0 = 12.0, 12.0 + 12.0 = 24.0
4 6 9 K:
6 4 9 13 + -
9.0 + 13.0 = 22.0, 4.0 - 22.0 = -18.0, 6.0 - -18.0 = 24.0
4 6 10 10:
4 6 10 + 10 - *
6.0 + 10.0 = 16.0, 16.0 - 10.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 10 J:
4 6 11 10 - * *
11.0 - 10.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 10 Q:
4 10 6 / 12 * +
4 6 10 K:
4 6 J J:
4 6 11 + 11 - *
6.0 + 11.0 = 17.0, 17.0 - 11.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 J Q:
4 6 12 11 - * *
12.0 - 11.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 J K:
4 6 Q Q:
4 6 12 + 12 - *
```

```
6.0 + 12.0 = 18.0, 18.0 - 12.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 0 K:
4 6 13 12 - * *
13.0 - 12.0 = 1.0, 6.0 * 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 6 K K:
4 6 13 13 + -
13.0 + 13.0 = 26.0, 6.0 - 26.0 = -20.0, 4.0 - -20.0 = 24.0
4 7 7 7:
4777/-*
7.0 / 7.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 7 8:
477+8-*
7.0 + 7.0 = 14.0, 14.0 - 8.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 7 9:
4 7 7 10:
4 7 7 J:
47 * 7 + 11 -
4.0 \times 7.0 = 28.0, 28.0 + 7.0 = 35.0, 35.0 - 11.0 = 24.0
4 7 7 Q:
4 7 7 K:
4 7 8 8:
47+8-8*
4.0 + 7.0 = 11.0, 11.0 - 8.0 = 3.0, 3.0 * 8.0 = 24.0
4 7 8 9:
4 7 8 + 9 - *
7.0 + 8.0 = 15.0, 15.0 - 9.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 8 10:
7 4 / 8 * 10 +
7.0 / 4.0 = 1.75, 1.75 * 8.0 = 14.0, 14.0 + 10.0 = 24.0
4 7 8 J:
4 11 7 - * 8 +
11.0 - 7.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
4 7 8 0:
47 * 8 + 12 -
4.0 * 7.0 = 28.0, 28.0 + 8.0 = 36.0, 36.0 - 12.0 = 24.0
4 7 8 K:
48-713-*
4.0 - 8.0 = -4.0, 7.0 - 13.0 = -6.0, -4.0 * -6.0 = 24.0
4799:
4799/-*
9.0 / 9.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 9 10:
4 7 9 + 10 - *
7.0 + 9.0 = 16.0, 16.0 - 10.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 9 J:
7 4 - 11 * 9 -
7.0 - 4.0 = 3.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
4 7 9 Q:
4 7 + 9 - 12 *
4.0 + 7.0 = 11.0, 11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0
4 7 9 K:
4 7 * 9 + 13 -
4.0 \times 7.0 = 28.0, 28.0 + 9.0 = 37.0, 37.0 - 13.0 = 24.0
4 7 10 10:
4 7 10 10 / - *
10.0 / 10.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 10 J:
4 7 10 + 11 - *
7.0 + 10.0 = 17.0, 17.0 - 11.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 10 Q:
4 10 + 7 / 12 *
4.0 + 10.0 = 14.0, 14.0 / 7.0 = 2.0, 2.0 * 12.0 = 24.0
4 7 10 K:
47JJ:
4 7 11 11 / - *
11.0 / 11.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
47 J 0:
4 7 11 + 12 - *
7.0 + 11.0 = 18.0, 18.0 - 12.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 J K:
4 11 * 7 13 + -
4.0 * 11.0 = 44.0, 7.0 + 13.0 = 20.0, 44.0 - 20.0 = 24.0
4 7 Q Q:
4 7 12 12 / - *
12.0 / 12.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 Q K:
4 7 12 + 13 - *
7.0 + 12.0 = 19.0, 19.0 - 13.0 = 6.0, 4.0 * 6.0 = 24.0
4 7 K K:
4 7 13 13 / - *
13.0 / 13.0 = 1.0, 7.0 - 1.0 = 6.0, 4.0 * 6.0 = 24.0
4 8 8 8:
4 8 8 / - 8 *
8.0 / 8.0 = 1.0, 4.0 - 1.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 8 9:
4.0 + 8.0 = 12.0, 12.0 - 9.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 8 10:
```

```
4 8 8 + 10 - *
8.0 + 8.0 = 16.0, 16.0 - 10.0 = 6.0, 4.0 * 6.0 = 24.0
4 8 8 J:
8 8 11 * + 4 /
8.0 \times 11.0 = 88.0, 8.0 + 88.0 = 96.0, 96.0 / 4.0 = 24.0
4 8 8 Q:
4 12 8 - * 8 +
12.0 - 8.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
4 8 8 K:
8 13 * 8 - 4 /
8.0 \times 13.0 = 104.0, 104.0 - 8.0 = 96.0, 96.0 / 4.0 = 24.0
4 8 9 9:
499/-8*
9.0 / 9.0 = 1.0, 4.0 - 1.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 9 10:
4 9 + 10 - 8 *
4.0 + 9.0 = 13.0, 13.0 - 10.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 9 J:
4 8 9 + 11 - *
8.0 + 9.0 = 17.0, 17.0 - 11.0 = 6.0, 4.0 * 6.0 = 24.0
4 8 9 Q:
48 * 9 * 12 /
4.0 * 8.0 = 32.0, 32.0 * 9.0 = 288.0, 288.0 / 12.0 = 24.0
4 8 9 K:
4 13 9 - * 8 +
13.0 - 9.0 = 4.0, 4.0 * 4.0 = 16.0, 16.0 + 8.0 = 24.0
4 8 10 10:
4 8 10 - 10 * -
8.0 - 10.0 = -2.0, -2.0 * 10.0 = -20.0, 4.0 - -20.0 = 24.0
4 8 10 J:
4 10 + 11 - 8 *
4.0 + 10.0 = 14.0, 14.0 - 11.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 10 Q:
4 8 + 10 - 12 *
4.0 + 8.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
4 8 10 K:
48 J J:
4 11 11 / - 8 *
11.0 / 11.0 = 1.0, 4.0 - 1.0 = 3.0, 3.0 * 8.0 = 24.0
48 J 0:
4 11 8 - * 12 +
11.0 - 8.0 = 3.0, 4.0 * 3.0 = 12.0, 12.0 + 12.0 = 24.0
48JK:
4 8 11 + 13 - *
8.0 + 11.0 = 19.0, 19.0 - 13.0 = 6.0, 4.0 * 6.0 = 24.0
4 8 Q Q:
4 12 + 8 / 12 *
4.0 + 12.0 = 16.0, 16.0 / 8.0 = 2.0, 2.0 * 12.0 = 24.0
4 8 Q K:
4 12 + 13 - 8 *
4.0 + 12.0 = 16.0, 16.0 - 13.0 = 3.0, 3.0 * 8.0 = 24.0
4 8 K K:
4 13 13 / - 8 *
13.0 / 13.0 = 1.0, 4.0 - 1.0 = 3.0, 3.0 * 8.0 = 24.0
4 9 9 9:
4 9 9 10:
9 4 9 10 +
9.0 + 10.0 = 19.0, 4.0 - 19.0 = -15.0, 9.0 - -15.0 = 24.0
4 9 9 J:
4 9 9 Q:
4 9 9 + 12 - *
9.0 + 9.0 = 18.0, 18.0 - 12.0 = 6.0, 4.0 * 6.0 = 24.0
4 9 9 K:
4 9 10 10:
4 9 10 J:
4 9 11 - 10 * -
9.0 - 11.0 = -2.0, -2.0 * 10.0 = -20.0, 4.0 - -20.0 = 24.0
4 9 10 Q:
10 9 4 - / 12 *
9.0 - 4.0 = 5.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
4 9 10 K:
4 9 10 + 13 - *
9.0 + 10.0 = 19.0, 19.0 - 13.0 = 6.0, 4.0 * 6.0 = 24.0
4911:
4 11 * 9 11 + -
4.0 * 11.0 = 44.0, 9.0 + 11.0 = 20.0, 44.0 - 20.0 = 24.0
4 9 J Q:
4 9 + 11 - 12 *
4.0 + 9.0 = 13.0, 13.0 - 11.0 = 2.0, 2.0 * 12.0 = 24.0
4 9 J K:
4 9 Q Q:
4 12 - 9 12 - *
4.0 - 12.0 = -8.0, 9.0 - 12.0 = -3.0, -8.0 * -3.0 = 24.0
4 9 Q K:
4 9 K K:
4 10 10 10:
4 10 10 J:
4 11 * 10 10 + -
```

```
4.0 \times 11.0 = 44.0, 10.0 + 10.0 = 20.0, 44.0 - 20.0 = 24.0
4 10 10 Q:
4 10 10 12 - *
10.0 - 12.0 = -2.0, 10.0 * -2.0 = -20.0, 4.0 - -20.0 = 24.0
4 10 10 K:
4 10 ] ]:
4 10 J 0:
10 11 + 12 4 / +
10.0 + 11.0 = 21.0, 12.0 / 4.0 = 3.0, 21.0 + 3.0 = 24.0
4 10 J K:
4 10 11 13 - * -
11.0 - 13.0 = -2.0, 10.0 * -2.0 = -20.0, 4.0 - -20.0 = 24.0
4 10 Q Q:
4 10 + 12 - 12 *
4.0 + 10.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
4 10 Q K:
4 12 - 10 13 - *
4.0 - 12.0 = -8.0, 10.0 - 13.0 = -3.0, -8.0 * -3.0 = 24.0
4 10 K K:
4 J J J:
4 J J Q:
4 J J K:
4 J Q Q:
4 J Q K:
4 11 + 13 - 12 *
4.0 + 11.0 = 15.0, 15.0 - 13.0 = 2.0, 2.0 * 12.0 = 24.0
4 J K K:
4 Q Q Q:
4 12 * 12 12 + -
4.0 \times 12.0 = 48.0, 12.0 + 12.0 = 24.0, 48.0 - 24.0 = 24.0
4 Q Q K:
4 Q K K:
4 K K K:
5 5 5 5:
55 * 55 /
5.0 * 5.0 = 25.0, 5.0 / 5.0 = 1.0, 25.0 - 1.0 = 24.0
5 5 5 6:
55 * 5 + 6 -
5.0 * 5.0 = 25.0, 25.0 + 5.0 = 30.0, 30.0 - 6.0 = 24.0
5 5 5 7:
5 5 5 8:
5 5 5 9:
5 5 + 5 9 + +
5.0 + 5.0 = 10.0, 5.0 + 9.0 = 14.0, 10.0 + 14.0 = 24.0
5 5 5 10:
5 5 5 J:
5 5 5 0:
5 5 + 5 / 12 *
5.0 + 5.0 = 10.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
5 5 5 K:
5 5 6 6:
5 5 + 6 - 6 *
5.0 + 5.0 = 10.0, 10.0 - 6.0 = 4.0, 4.0 * 6.0 = 24.0
5 5 6 7:
5.0 \times 5.0 = 25.0, 25.0 + 6.0 = 31.0, 31.0 - 7.0 = 24.0
5 5 6 8:
5 5 + 6 8 + +
5.0 + 5.0 = 10.0, 6.0 + 8.0 = 14.0, 10.0 + 14.0 = 24.0
5 5 6 9:
5 5 6 10:
5 5 6 J:
5 5 6 * + 11 -
5.0 \times 6.0 = 30.0, 5.0 + 30.0 = 35.0, 35.0 - 11.0 = 24.0
5 5 6 Q:
5 5 6 K:
5 5 7 7:
55+77++
5.0 + 5.0 = 10.0, 7.0 + 7.0 = 14.0, 10.0 + 14.0 = 24.0
5 5 7 8:
55 + 7 - 8 *
5.0 + 5.0 = 10.0, 10.0 - 7.0 = 3.0, 3.0 * 8.0 = 24.0
5 5 7 9:
5 5 7 10:
5 7 + 5 / 10 *
5.0 + 7.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
5 5 7 J:
5 7 11 5 / - *
11.0 / 5.0 = 2.2, 7.0 - 2.2 = 4.8, 5.0 * 4.8 = 24.0
5 5 7 Q:
5 5 7 K:
5 5 8 8:
55 * 88 /
5.0 * 5.0 = 25.0, 8.0 / 8.0 = 1.0, 25.0 - 1.0 = 24.0
5 5 8 9:
5.0 * 5.0 = 25.0, 25.0 + 8.0 = 33.0, 33.0 - 9.0 = 24.0
5 5 8 10:
```

```
5 10 + 8 * 5 /
5.0 + 10.0 = 15.0, 15.0 * 8.0 = 120.0, 120.0 / 5.0 = 24.0
5 5 8 J:
58 * 511 + -
5.0 \times 8.0 = 40.0, 5.0 + 11.0 = 16.0, 40.0 - 16.0 = 24.0
5 5 8 0:
5 5 + 8 - 12 *
5.0 + 5.0 = 10.0, 10.0 - 8.0 = 2.0, 2.0 * 12.0 = 24.0
5 5 8 K:
58-513-*
5.0 - 8.0 = -3.0, 5.0 - 13.0 = -8.0, -3.0 * -8.0 = 24.0
5 5 9 9:
55 * 99 /
5.0 * 5.0 = 25.0, 9.0 / 9.0 = 1.0, 25.0 - 1.0 = 24.0
5 5 9 10:
5 5 * 9 + 10 -
5.0 * 5.0 = 25.0, 25.0 + 9.0 = 34.0, 34.0 - 10.0 = 24.0
5 5 9 J:
5 9 - 5 11 - *
5.0 - 9.0 = -4.0, 5.0 - 11.0 = -6.0, -4.0 * -6.0 = 24.0
5 5 9 Q:
5 5 9 K:
5 5 10 10:
5 5 * 10 10 / -
5.0 * 5.0 = 25.0, 10.0 / 10.0 = 1.0, 25.0 - 1.0 = 24.0
5 5 10 J:
5 5 * 10 + 11 -
5.0 * 5.0 = 25.0, 25.0 + 10.0 = 35.0, 35.0 - 11.0 = 24.0
5 5 10 Q:
5 5 10 K:
5 5 / 10 13 + +
5.0 / 5.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
5 5 J J:
5 5 * 11 11 / -
5.0 \times 5.0 = 25.0, 11.0 / 11.0 = 1.0, 25.0 - 1.0 = 24.0
5 5 1 0:
5 5 * 11 + 12 -
5.0 \times 5.0 = 25.0, 25.0 + 11.0 = 36.0, 36.0 - 12.0 = 24.0
5 5 1 K:
5 5 11 13 + - -
11.0 + 13.0 = 24.0, 5.0 - 24.0 = -19.0, 5.0 - -19.0 = 24.0
5 5 0 0:
5 5 12 12 + - -
12.0 + 12.0 = 24.0, 5.0 - 24.0 = -19.0, 5.0 - -19.0 = 24.0
5 5 Q K:
5 5 * 12 + 13 -
5.0 * 5.0 = 25.0, 25.0 + 12.0 = 37.0, 37.0 - 13.0 = 24.0
5 5 K K:
5 5 * 13 13 / -
5.0 * 5.0 = 25.0, 13.0 / 13.0 = 1.0, 25.0 - 1.0 = 24.0
5 6 6 6:
5 6 6 / - 6 *
6.0 / 6.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 6 7:
5 6 + 6 7 + +
5.0 + 6.0 = 11.0, 6.0 + 7.0 = 13.0, 11.0 + 13.0 = 24.0
5 6 6 8:
6 5 8 - 6 * -
5.0 - 8.0 = -3.0, -3.0 * 6.0 = -18.0, 6.0 - -18.0 = 24.0
5 6 6 9:
69 * 65 *
6.0 \times 9.0 = 54.0, 6.0 \times 5.0 = 30.0, 54.0 - 30.0 = 24.0
5 6 6 10:
6 6 + 5 / 10 *
6.0 + 6.0 = 12.0, 12.0 / 5.0 = 2.4, 2.4 * 10.0 = 24.0
5 6 6 J:
5 6 6 0:
5.6 * 6 + 12 -
5.0 \times 6.0 = 30.0, 30.0 + 6.0 = 36.0, 36.0 - 12.0 = 24.0
5 6 6 K:
5 6 7 7:
577/-6*
7.0 / 7.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 7 8:
57+86-*
5.0 + 7.0 = 12.0, 8.0 - 6.0 = 2.0, 12.0 * 2.0 = 24.0
5 6 7 9:
657-9*-
5.0 - 7.0 = -2.0, -2.0 * 9.0 = -18.0, 6.0 - -18.0 = 24.0
5 6 7 10:
5 6 7 J:
5 6 7 Q:
5 7 + 6 / 12 *
5.0 + 7.0 = 12.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
5 6 7 K:
5 6 * 7 + 13 -
5.0 * 6.0 = 30.0, 30.0 + 7.0 = 37.0, 37.0 - 13.0 = 24.0
5 6 8 8:
```

```
5 6 + 8 - 8 *
5.0 + 6.0 = 11.0, 11.0 - 8.0 = 3.0, 3.0 * 8.0 = 24.0
5 6 8 9:
58+9-6*
5.0 + 8.0 = 13.0, 13.0 - 9.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 8 10:
56 * 8 * 10 /
5.0 * 6.0 = 30.0, 30.0 * 8.0 = 240.0, 240.0 / 10.0 = 24.0
5 6 8 J:
5 6 8 Q:
5 12 6 / - 8 *
12.0 / 6.0 = 2.0, 5.0 - 2.0 = 3.0, 3.0 * 8.0 = 24.0
5 6 8 K:
5 13 + 8 * 6 /
5.0 + 13.0 = 18.0, 18.0 * 8.0 = 144.0, 144.0 / 6.0 = 24.0
5 6 9 9:
5 9 6 - * 9 +
9.0 - 6.0 = 3.0, 5.0 * 3.0 = 15.0, 15.0 + 9.0 = 24.0
5 6 9 10:
5 9 + 10 - 6 *
5.0 + 9.0 = 14.0, 14.0 - 10.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 9 J:
5 11 + 9 * 6 /
5.0 + 11.0 = 16.0, 16.0 * 9.0 = 144.0, 144.0 / 6.0 = 24.0
5 6 9 Q:
5 6 + 9 - 12 *
5.0 + 6.0 = 11.0, 11.0 - 9.0 = 2.0, 2.0 * 12.0 = 24.0
5 6 9 K:
5 13 - 6 9 - *
5.0 - 13.0 = -8.0, 6.0 - 9.0 = -3.0, -8.0 * -3.0 = 24.0
5 6 10 10:
5 10 10 / - 6 *
10.0 / 10.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 10 J:
5 10 + 11 - 6 *
5.0 + 10.0 = 15.0, 15.0 - 11.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 10 0:
5 6 12 10 / - *
12.0 / 10.0 = 1.2, 6.0 - 1.2 = 4.8, 5.0 * 4.8 = 24.0
5 6 10 K:
6 5 10 13 + - -
10.0 + 13.0 = 23.0, 5.0 - 23.0 = -18.0, 6.0 - -18.0 = 24.0
5 6 J J:
5 11 11 / - 6 *
11.0 / 11.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 J Q:
5 11 + 12 - 6 *
5.0 + 11.0 = 16.0, 16.0 - 12.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 J K:
5 13 6 - * 11 -
13.0 - 6.0 = 7.0, 5.0 * 7.0 = 35.0, 35.0 - 11.0 = 24.0
5 6 Q Q:
5 12 12 / - 6 *
12.0 / 12.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 6 Q K:
5 6 12 13 +
12.0 + 13.0 = 25.0, 6.0 - 25.0 = -19.0, 5.0 - -19.0 = 24.0
5 6 K K:
5 13 13 / - 6 *
13.0 / 13.0 = 1.0, 5.0 - 1.0 = 4.0, 4.0 * 6.0 = 24.0
5 7 7 7:
5 7 7 8:
5 7 7 9:
57+97-*
5.0 + 7.0 = 12.0, 9.0 - 7.0 = 2.0, 12.0 * 2.0 = 24.0
5 7 7 10:
7 5 - 7 * 10 +
7.0 - 5.0 = 2.0, 2.0 * 7.0 = 14.0, 14.0 + 10.0 = 24.0
5 7 7 1:
5 11 7 / - 7 *
11.0 \ / \ 7.0 = 1.5714285714285714, \ 5.0 - 1.5714285714285714 = 3.428571428571429, \ 3.428571428571428571429 * \ 7.0 = 24.0 
5 7 7 0:
5 7 7 K:
5 7 8 8:
75-8*8+
7.0 - 5.0 = 2.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
5 7 8 9:
57+9-8*
5.0 + 7.0 = 12.0, 12.0 - 9.0 = 3.0, 3.0 * 8.0 = 24.0
5 7 8 10:
5 7 + 10 8 - *
5.0 + 7.0 = 12.0, 10.0 - 8.0 = 2.0, 12.0 * 2.0 = 24.0
5 7 8 J:
5 7 8 Q:
5 7 8 K:
5 7 9 9:
5 7 9 10:
5 10 7 - * 9 +
```

```
10.0 - 7.0 = 3.0, 5.0 * 3.0 = 15.0, 15.0 + 9.0 = 24.0
5 7 9 J:
5 7 + 11 9 - *
5.0 + 7.0 = 12.0, 11.0 - 9.0 = 2.0, 12.0 * 2.0 = 24.0
5 7 9 0:
5 9 + 7 / 12 *
5.0 + 9.0 = 14.0, 14.0 / 7.0 = 2.0, 2.0 * 12.0 = 24.0
5 7 9 K:
5 9 - 7 13 - *
5.0 - 9.0 = -4.0, 7.0 - 13.0 = -6.0, -4.0 * -6.0 = 24.0
5 7 10 10:
7 5 / 10 * 10 +
7.0 / 5.0 = 1.4, 1.4 * 10.0 = 14.0, 14.0 + 10.0 = 24.0
5 7 10 J:
7 10 5 - * 11 -
10.0 - 5.0 = 5.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
5 7 10 Q:
5 7 + 10 - 12 *
5.0 + 7.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
5 7 10 K:
5 13 - 7 10 - *
5.0 - 13.0 = -8.0, 7.0 - 10.0 = -3.0, -8.0 * -3.0 = 24.0
5 7 J J:
5 11 - 7 11 - *
5.0 - 11.0 = -6.0, 7.0 - 11.0 = -4.0, -6.0 * -4.0 = 24.0
5 7 J Q:
5 7 J K:
5 7 + 13 11 - *
5.0 + 7.0 = 12.0, 13.0 - 11.0 = 2.0, 12.0 * 2.0 = 24.0
5 7 Q Q:
7 12 * 5 12 * -
7.0 * 12.0 = 84.0, 5.0 * 12.0 = 60.0, 84.0 - 60.0 = 24.0
5 7 Q K:
5 7 K K:
5 7 13 13 + - -
13.0 + 13.0 = 26.0, 7.0 - 26.0 = -19.0, 5.0 - -19.0 = 24.0
5 8 8 8:
58 * 88 + -
5.0 \times 8.0 = 40.0, 8.0 + 8.0 = 16.0, 40.0 - 16.0 = 24.0
5 8 8 9:
885 - / 9 *
5 8 8 10:
58+10-8*
5.0 + 8.0 = 13.0, 13.0 - 10.0 = 3.0, 3.0 * 8.0 = 24.0
5 8 8 J:
5 8 8 0:
5 8 8 K:
8 5 8 13 + - -
8.0 + 13.0 = 21.0, 5.0 - 21.0 = -16.0, 8.0 - -16.0 = 24.0
5 8 9 9:
5 8 9 10:
5 8 9 J:
5 9 + 11 - 8 *
5.0 + 9.0 = 14.0, 14.0 - 11.0 = 3.0, 3.0 * 8.0 = 24.0
5 8 9 Q:
8 5 9 12 +
9.0 + 12.0 = 21.0, 5.0 - 21.0 = -16.0, 8.0 - -16.0 = 24.0
5 8 9 K:
5 9 * 8 13 + -
5.0 \times 9.0 = 45.0, 8.0 + 13.0 = 21.0, 45.0 - 21.0 = 24.0
5 8 10 10:
5 8 10 J:
8 5 10 11 + -
10.0 + 11.0 = 21.0, 5.0 - 21.0 = -16.0, 8.0 - -16.0 = 24.0
5 8 10 0:
5 10 + 12 - 8 *
5.0 + 10.0 = 15.0, 15.0 - 12.0 = 3.0, 3.0 * 8.0 = 24.0
5 8 10 K:
5811:
5810:
5 8 + 11 - 12 *
5.0 + 8.0 = 13.0, 13.0 - 11.0 = 2.0, 2.0 * 12.0 = 24.0
5 8 J K:
5 11 + 13 - 8 *
5.0 + 11.0 = 16.0, 16.0 - 13.0 = 3.0, 3.0 * 8.0 = 24.0
5 8 Q Q:
8 5 - 12 * 12 -
8.0 - 5.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
5 8 Q K:
5 8 K K:
5 9 9 9:
5 9 9 10:
5 9 9 J:
9 5 9 11 +
9.0 + 11.0 = 20.0, 5.0 - 20.0 = -15.0, 9.0 - -15.0 = 24.0
5 9 9 Q:
5 9 * 9 12 + -
```

```
5.0 * 9.0 = 45.0, 9.0 + 12.0 = 21.0, 45.0 - 21.0 = 24.0
5 9 9 K:
5 9 10 10:
9 5 10 10 +
10.0 + 10.0 = 20.0, 5.0 - 20.0 = -15.0, 9.0 - -15.0 = 24.0
5 9 10 J:
5 9 * 10 11 + -
5.0 \times 9.0 = 45.0, 10.0 + 11.0 = 21.0, 45.0 - 21.0 = 24.0
5 9 10 0:
5 9 10 K:
5 13 10 - * 9 +
13.0 - 10.0 = 3.0, 5.0 * 3.0 = 15.0, 15.0 + 9.0 = 24.0
5 9 J J:
5 9 J 0:
5 9 J K:
5 11 - 9 13 - *
5.0 - 11.0 = -6.0, 9.0 - 13.0 = -4.0, -6.0 * -4.0 = 24.0
5 9 Q Q:
5 9 + 12 - 12 *
5.0 + 9.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
5 9 Q K:
5 13 + 12 * 9 /
5.0 + 13.0 = 18.0, 18.0 * 12.0 = 216.0, 216.0 / 9.0 = 24.0
5 9 K K:
5 10 10 10:
5 10 10 J:
10 10 11 * + 5 /
10.0 * 11.0 = 110.0, 10.0 + 110.0 = 120.0, 120.0 / 5.0 = 24.0
5 10 10 Q:
10 5 / 10 12 + +
10.0 / 5.0 = 2.0, 10.0 + 12.0 = 22.0, 2.0 + 22.0 = 24.0
5 10 10 K:
10 13 * 10 - 5 /
10.0 \times 13.0 = 130.0, 130.0 - 10.0 = 120.0, 120.0 / 5.0 = 24.0
5 10 J J:
10 5 / 11 11 + +
10.0 / 5.0 = 2.0, 11.0 + 11.0 = 22.0, 2.0 + 22.0 = 24.0
5 10 1 0:
5 10 1 K:
5 10 0 0:
5 10 0 K:
5 10 + 13 - 12 *
5.0 + 10.0 = 15.0, 15.0 - 13.0 = 2.0, 2.0 * 12.0 = 24.0
5 10 K K:
5 10 * 13 13 + -
5.0 \times 10.0 = 50.0, 13.0 + 13.0 = 26.0, 50.0 - 26.0 = 24.0
5 1 1 1:
5 J J Q:
5 J J K:
5 J Q Q:
11 12 * 12 - 5 /
11.0 * 12.0 = 132.0, 132.0 - 12.0 = 120.0, 120.0 / 5.0 = 24.0
5 J Q K:
5 J K K:
5 Q Q Q:
5 Q Q K:
5 Q K K:
5 K K K:
6 6 6 6:
66+66++
6.0 + 6.0 = 12.0, 6.0 + 6.0 = 12.0, 12.0 + 12.0 = 24.0
6 6 6 7:
6 6 6 8:
666+8-*
6.0 + 6.0 = 12.0, 12.0 - 8.0 = 4.0, 6.0 * 4.0 = 24.0
6669:
6669-*-
6.0 - 9.0 = -3.0, 6.0 * -3.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 6 10:
6 10 * 6 6 * -
6.0 * 10.0 = 60.0, 6.0 * 6.0 = 36.0, 60.0 - 36.0 = 24.0
666J:
6 11 6 - * 6 -
11.0 - 6.0 = 5.0, 6.0 * 5.0 = 30.0, 30.0 - 6.0 = 24.0
6 6 6 Q:
6 6 + 6 / 12 *
6.0 + 6.0 = 12.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
6 6 6 K:
6 6 7 7:
6 6 7 8:
6 6 7 9:
6 6 7 + 9 - *
6.0 + 7.0 = 13.0, 13.0 - 9.0 = 4.0, 6.0 * 4.0 = 24.0
6 6 7 10:
6 6 7 10 - * -
7.0 - 10.0 = -3.0, 6.0 * -3.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 7 J:
6 11 * 7 6 * -
```

```
6.0 \times 11.0 = 66.0, 7.0 \times 6.0 = 42.0, 66.0 - 42.0 = 24.0
6 6 7 0:
6 7 * 6 12 + -
6.0 * 7.0 = 42.0, 6.0 + 12.0 = 18.0, 42.0 - 18.0 = 24.0
6 6 7 K:
6 6 8 8:
686-/8*
8.0 - 6.0 = 2.0, 6.0 / 2.0 = 3.0, 3.0 * 8.0 = 24.0
6 6 8 9:
668-9*-
6.0 - 8.0 = -2.0, -2.0 * 9.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 8 10:
6 6 8 + 10 - *
6.0 + 8.0 = 14.0, 14.0 - 10.0 = 4.0, 6.0 * 4.0 = 24.0
668J:
6 6 8 11 - * -
8.0 - 11.0 = -3.0, 6.0 * -3.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 8 Q:
6 6 * 8 * 12 /
6.0 * 6.0 = 36.0, 36.0 * 8.0 = 288.0, 288.0 / 12.0 = 24.0
6 6 8 K:
6 13 8 - * 6 -
13.0 - 8.0 = 5.0, 6.0 * 5.0 = 30.0, 30.0 - 6.0 = 24.0
6 6 9 9:
6 6 9 10:
6 10 + 9 * 6 /
6.0 + 10.0 = 16.0, 16.0 * 9.0 = 144.0, 144.0 / 6.0 = 24.0
6 6 9 J:
6 6 9 + 11 - *
6.0 + 9.0 = 15.0, 15.0 - 11.0 = 4.0, 6.0 * 4.0 = 24.0
6 6 9 Q:
6 6 9 12 - * -
9.0 - 12.0 = -3.0, 6.0 * -3.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 9 K:
6 13 * 9 6 * -
6.0 * 13.0 = 78.0, 9.0 * 6.0 = 54.0, 78.0 - 54.0 = 24.0
6 6 10 10:
6 6 10 1:
6 6 10 0:
6 6 + 10 - 12 *
6.0 + 6.0 = 12.0, 12.0 - 10.0 = 2.0, 2.0 * 12.0 = 24.0
6 6 10 K:
6 6 10 13 - * -
10.0 - 13.0 = -3.0, 6.0 \times -3.0 = -18.0, 6.0 - -18.0 = 24.0
66JJ:
6 6 J Q:
6 6 / 11 12 + +
6.0 / 6.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
6 6 J K:
6 6 11 13 + - -
11.0 + 13.0 = 24.0, 6.0 - 24.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 Q Q:
6 6 12 12 + - -
12.0 + 12.0 = 24.0, 6.0 - 24.0 = -18.0, 6.0 - -18.0 = 24.0
6 6 Q K:
12 6 6 / - 13 +
6.0 / 6.0 = 1.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
6 6 K K:
6 7 7 7:
6 7 7 8:
6 7 7 9:
6 7 7 10:
6 7 7 + 10 - *
7.0 + 7.0 = 14.0, 14.0 - 10.0 = 4.0, 6.0 * 4.0 = 24.0
6 7 7 J:
6 7 * 7 11 + -
6.0 \times 7.0 = 42.0, 7.0 + 11.0 = 18.0, 42.0 - 18.0 = 24.0
6 7 7 Q:
677K:
6 7 8 8:
6 7 8 9:
6897-/
9.0 - 7.0 = 2.0, 8.0 / 2.0 = 4.0, 6.0 * 4.0 = 24.0
6 7 8 10:
6 7 * 8 10 + -
6.0 * 7.0 = 42.0, 8.0 + 10.0 = 18.0, 42.0 - 18.0 = 24.0
6 7 8 J:
6 7 8 + 11 - *
7.0 + 8.0 = 15.0, 15.0 - 11.0 = 4.0, 6.0 * 4.0 = 24.0
6 7 8 Q:
6 8 + 7 / 12 *
6.0 + 8.0 = 14.0, 14.0 / 7.0 = 2.0, 2.0 * 12.0 = 24.0
6 7 8 K:
6 7 9 9:
6 7 9 - 9 * -
7.0 - 9.0 = -2.0, -2.0 * 9.0 = -18.0, 6.0 - -18.0 = 24.0
6 7 9 10:
6 7 9 J:
```

```
6 7 9 0:
6 7 9 + 12 - *
7.0 + 9.0 = 16.0, 16.0 - 12.0 = 4.0, 6.0 * 4.0 = 24.0
6 7 9 K:
6 7 10 10:
10 7 - 10 * 6 -
10.0 - 7.0 = 3.0, 3.0 * 10.0 = 30.0, 30.0 - 6.0 = 24.0
6 7 10 1:
6 7 10 Q:
6 10 7 - / 12 *
10.0 - 7.0 = 3.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
6 7 10 K:
6 7 10 + 13 - *
7.0 + 10.0 = 17.0, 17.0 - 13.0 = 4.0, 6.0 * 4.0 = 24.0
67JJ:
7 11 6 - * 11 -
11.0 - 6.0 = 5.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
67JQ:
6 7 + 11 - 12 *
6.0 + 7.0 = 13.0, 13.0 - 11.0 = 2.0, 2.0 * 12.0 = 24.0
6 7 J K:
7 6 - 11 13 + *
7.0 - 6.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
6 7 Q Q:
7 6 - 12 12 + *
7.0 - 6.0 = 1.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
6 7 Q K:
6 7 12 13 + - -
12.0 + 13.0 = 25.0, 7.0 - 25.0 = -18.0, 6.0 - -18.0 = 24.0
6 7 K K:
6 8 8 8:
86-8*8+
8.0 - 6.0 = 2.0, 2.0 * 8.0 = 16.0, 16.0 + 8.0 = 24.0
6889:
88+6/9*
6 8 8 10:
68108-/*
10.0 - 8.0 = 2.0, 8.0 / 2.0 = 4.0, 6.0 * 4.0 = 24.0
688J:
6 8 + 11 - 8 *
6.0 + 8.0 = 14.0, 14.0 - 11.0 = 3.0, 3.0 * 8.0 = 24.0
6 8 8 Q:
6 8 8 + 12 - *
8.0 + 8.0 = 16.0, 16.0 - 12.0 = 4.0, 6.0 * 4.0 = 24.0
6 8 8 K:
6899:
8 6 9 9 + / /
6 8 9 10:
6 8 10 - 9 * -
8.0 - 10.0 = -2.0, -2.0 * 9.0 = -18.0, 6.0 - -18.0 = 24.0
689J:
6 8 11 9 - / *
11.0 - 9.0 = 2.0, 8.0 / 2.0 = 4.0, 6.0 * 4.0 = 24.0
6 8 9 Q:
6 9 + 12 - 8 *
6.0 + 9.0 = 15.0, 15.0 - 12.0 = 3.0, 3.0 * 8.0 = 24.0
6 8 9 K:
6 8 9 + 13 - *
8.0 + 9.0 = 17.0, 17.0 - 13.0 = 4.0, 6.0 * 4.0 = 24.0
6 8 10 10:
6 8 10 J:
10 11 8 - * 6 -
11.0 - 8.0 = 3.0, 10.0 * 3.0 = 30.0, 30.0 - 6.0 = 24.0
6 8 10 0:
6 8 12 10 - / *
12.0 - 10.0 = 2.0, 8.0 / 2.0 = 4.0, 6.0 * 4.0 = 24.0
6 8 10 K:
6 10 + 13 - 8 *
6.0 + 10.0 = 16.0, 16.0 - 13.0 = 3.0, 3.0 * 8.0 = 24.0
6811:
8 6 11 11 + - -
11.0 + 11.0 = 22.0, 6.0 - 22.0 = -16.0, 8.0 - -16.0 = 24.0
68J0:
6 11 8 - / 12 *
11.0 - 8.0 = 3.0, 6.0 / 3.0 = 2.0, 2.0 * 12.0 = 24.0
68JK:
6 8 * 11 13 + -
6.0 * 8.0 = 48.0, 11.0 + 13.0 = 24.0, 48.0 - 24.0 = 24.0
6 8 Q Q:
6 8 + 12 - 12 *
6.0 + 8.0 = 14.0, 14.0 - 12.0 = 2.0, 2.0 * 12.0 = 24.0
6 8 Q K:
6 8 K K:
6 8 13 13 +
13.0 + 13.0 = 26.0, 8.0 - 26.0 = -18.0, 6.0 - -18.0 = 24.0
6 9 9 9:
```

```
6 9 9 10:
96/10 * 9+
9.0 / 6.0 = 1.5, 1.5 * 10.0 = 15.0, 15.0 + 9.0 = 24.0
699]:
6 9 9 11 - * -
9.0 - 11.0 = -2.0, 9.0 * -2.0 = -18.0, 6.0 - -18.0 = 24.0
6990:
9 6 9 12 + - -
9.0 + 12.0 = 21.0, 6.0 - 21.0 = -15.0, 9.0 - -15.0 = 24.0
699K:
6 9 10 10:
6 9 10 J:
9 6 10 11 +
10.0 + 11.0 = 21.0, 6.0 - 21.0 = -15.0, 9.0 - -15.0 = 24.0
6 9 10 Q:
6 9 10 12 - * -
10.0 - 12.0 = -2.0, 9.0 * -2.0 = -18.0, 6.0 - -18.0 = 24.0
6 9 10 K:
6 9 J J:
6 9 J Q:
6 11 9 - * 12 +
11.0 - 9.0 = 2.0, 6.0 * 2.0 = 12.0, 12.0 + 12.0 = 24.0
6 9 J K:
6 9 11 13 - *
11.0 - 13.0 = -2.0, 9.0 * -2.0 = -18.0, 6.0 - -18.0 = 24.0
6 9 Q Q:
6 12 + 9 / 12 *
6.0 + 12.0 = 18.0, 18.0 / 9.0 = 2.0, 2.0 * 12.0 = 24.0
6 9 Q K:
6 9 + 13 - 12 *
6.0 + 9.0 = 15.0, 15.0 - 13.0 = 2.0, 2.0 * 12.0 = 24.0
6 9 K K:
6 10 10 10:
10 6 10 10 + - -
10.0 + 10.0 = 20.0, 6.0 - 20.0 = -14.0, 10.0 - -14.0 = 24.0
6 10 10 1:
6 10 10 0:
6 10 10 K:
10 13 10 - * 6 -
13.0 - 10.0 = 3.0, 10.0 * 3.0 = 30.0, 30.0 - 6.0 = 24.0
6 10 1 1:
6 10 J 0:
10 11 6 - / 12 *
11.0 - 6.0 = 5.0, 10.0 / 5.0 = 2.0, 2.0 * 12.0 = 24.0
6 10 J K:
6 10 Q Q:
6 12 10 - * 12 +
12.0 - 10.0 = 2.0, 6.0 * 2.0 = 12.0, 12.0 + 12.0 = 24.0
6 10 Q K:
6 12 13 10 - / *
13.0 - 10.0 = 3.0, 12.0 / 3.0 = 4.0, 6.0 * 4.0 = 24.0
6 10 K K:
6 J J J:
6 J J Q:
11 11 + 12 6 / +
11.0 + 11.0 = 22.0, 12.0 / 6.0 = 2.0, 22.0 + 2.0 = 24.0
6 J J K:
6 J Q Q:
11 12 * 12 + 6 /
11.0 \times 12.0 = 132.0, 132.0 + 12.0 = 144.0, 144.0 / 6.0 = 24.0
6 J Q K:
6 13 11 - * 12 +
13.0 - 11.0 = 2.0, 6.0 * 2.0 = 12.0, 12.0 + 12.0 = 24.0
6 J K K:
6 0 0 0:
12 12 6 - / 12 *
12.0 - 6.0 = 6.0, 12.0 / 6.0 = 2.0, 2.0 * 12.0 = 24.0
6 Q Q K:
12 13 * 12 - 6 /
12.0 * 13.0 = 156.0, 156.0 - 12.0 = 144.0, 144.0 / 6.0 = 24.0
6 0 K K:
13 12 6 / - 13 +
12.0 / 6.0 = 2.0, 13.0 - 2.0 = 11.0, 11.0 + 13.0 = 24.0
6 K K K:
7 7 7 7:
7 7 7 8:
7 7 7 9:
7 7 7 10:
777J:
7 7 7 Q:
7 7 + 7 / 12 *
7.0 + 7.0 = 14.0, 14.0 / 7.0 = 2.0, 2.0 * 12.0 = 24.0
7 7 7 K:
7 7 8 8:
7 7 8 9:
7 7 8 10:
7 7 8 J:
7 7 + 11 - 8 *
```

```
7.0 + 7.0 = 14.0, 14.0 - 11.0 = 3.0, 3.0 * 8.0 = 24.0
7 7 8 Q:
7 7 8 K:
7 7 9 9:
7 7 9 10:
7 9 7 - * 10 +
9.0 - 7.0 = 2.0, 7.0 * 2.0 = 14.0, 14.0 + 10.0 = 24.0
7 7 9 1:
7 7 9 0:
7 7 9 K:
7 7 10 10:
7 7 10 J:
7 7 10 Q:
7 7 10 K:
7 7 / 10 13 + +
7.0 / 7.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
77JJ:
77JQ:
7 7 / 11 12 + +
7.0 / 7.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
77JK:
7 7 11 13
11.0 + 13.0 = 24.0, 7.0 - 24.0 = -17.0, 7.0 - -17.0 = 24.0
7 7 Q Q:
7 7 12 12 + -
12.0 + 12.0 = 24.0, 7.0 - 24.0 = -17.0, 7.0 - -17.0 = 24.0
7 7 Q K:
7 7 * 12 13 + -
7.0 \times 7.0 = 49.0, 12.0 + 13.0 = 25.0, 49.0 - 25.0 = 24.0
7 7 K K:
7 8 8 8:
7 8 8 9:
879-8*-
7.0 - 9.0 = -2.0, -2.0 * 8.0 = -16.0, 8.0 - -16.0 = 24.0
7 8 8 10:
8 10 * 8 7 * -
8.0 \times 10.0 = 80.0, 8.0 \times 7.0 = 56.0, 80.0 - 56.0 = 24.0
7 8 8 1:
8 11 7 - * 8 -
11.0 - 7.0 = 4.0, 8.0 * 4.0 = 32.0, 32.0 - 8.0 = 24.0
7 8 8 0:
78+12-8*
7.0 + 8.0 = 15.0, 15.0 - 12.0 = 3.0, 3.0 * 8.0 = 24.0
7 8 8 K:
8 7 8 13 + / /
8.0 + 13.0 = 21.0, 7.0 / 21.0 = 0.333333333333333, 8.0 / 0.33333333333333 = 24.0
7 8 9 9:
7 8 9 10:
8 9 10 7 - / *
10.0 - 7.0 = 3.0, 9.0 / 3.0 = 3.0, 8.0 * 3.0 = 24.0
7 8 9 J:
7 8 9 Q:
7 9 + 8 / 12 *
7.0 + 9.0 = 16.0, 16.0 / 8.0 = 2.0, 2.0 * 12.0 = 24.0
7 8 9 K:
7 9 + 13 - 8 *
7.0 + 9.0 = 16.0, 16.0 - 13.0 = 3.0, 3.0 * 8.0 = 24.0
7 8 10 10:
7 10 8 - * 10 +
10.0 - 8.0 = 2.0, 7.0 * 2.0 = 14.0, 14.0 + 10.0 = 24.0
7 8 10 J:
8 7 10 11 + / /
10.0 + 11.0 = 21.0, 7.0 / 21.0 = 0.333333333333333, 8.0 / 0.33333333333333 = 24.0
7 8 10 Q:
7 8 10 K:
8 7 10 13 +
10.0 + 13.0 = 23.0, 7.0 - 23.0 = -16.0, 8.0 - -16.0 = 24.0
7 8 J J:
7 8 1 0:
8 7 11 12 + -
11.0 + 12.0 = 23.0, 7.0 - 23.0 = -16.0, 8.0 - -16.0 = 24.0
78JK:
7 13 8 - * 11 -
13.0 - 8.0 = 5.0, 7.0 * 5.0 = 35.0, 35.0 - 11.0 = 24.0
7 8 0 0:
8 7 - 12 12 + *
8.0 - 7.0 = 1.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
7 8 Q K:
7 8 12 13 + -
12.0 + 13.0 = 25.0, 8.0 - 25.0 = -17.0, 7.0 - -17.0 = 24.0
7 8 K K:
7 9 9 9:
7 9 9 10:
7 9 9 J:
7 9 9 Q:
7 9 9 K:
9.0 + 13.0 = 22.0, 7.0 - 22.0 = -15.0, 9.0 - -15.0 = 24.0
```

```
7 9 10 10:
7 9 10 J:
7 11 9 - * 10 +
11.0 - 9.0 = 2.0, 7.0 * 2.0 = 14.0, 14.0 + 10.0 = 24.0
7 9 10 0:
9 7 10 12 + -
10.0 + 12.0 = 22.0, 7.0 - 22.0 = -15.0, 9.0 - -15.0 = 24.0
7 9 10 K:
79JJ:
9 7 11 11 + - -
11.0 + 11.0 = 22.0, 7.0 - 22.0 = -15.0, 9.0 - -15.0 = 24.0
7 9 J 0:
7 11 + 9 / 12 *
7.0 + 11.0 = 18.0, 18.0 / 9.0 = 2.0, 2.0 * 12.0 = 24.0
7 9 J K:
7 9 Q Q:
9 12 * 7 12 * -
9.0 \times 12.0 = 108.0, 7.0 \times 12.0 = 84.0, 108.0 - 84.0 = 24.0
7 9 Q K:
7 9 K K:
7 9 13 13 + - -
13.0 + 13.0 = 26.0, 9.0 - 26.0 = -17.0, 7.0 - -17.0 = 24.0
7 10 10 10:
7 10 10 J:
10 7 10 11 + -
10.0 + 11.0 = 21.0, 7.0 - 21.0 = -14.0, 10.0 - -14.0 = 24.0
7 10 10 Q:
7 12 10 - * 10 +
12.0 - 10.0 = 2.0, 7.0 * 2.0 = 14.0, 14.0 + 10.0 = 24.0
7 10 10 K:
7 10 J J:
7 10 J Q:
7 10 J K:
7 13 11 - * 10 +
13.0 - 11.0 = 2.0, 7.0 * 2.0 = 14.0, 14.0 + 10.0 = 24.0
7 10 0 0:
10 7 - 12 * 12 -
10.0 - 7.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
7 10 0 K:
7 13 + 12 * 10 /
7.0 + 13.0 = 20.0, 20.0 * 12.0 = 240.0, 240.0 / 10.0 = 24.0
7 10 K K:
7 J J J:
7 J J 0:
7 J J K:
7 J Q Q:
7 J Q K:
7 J K K:
7 Q Q Q:
7 Q Q K:
12 12 13 7 - / *
13.0 - 7.0 = 6.0, 12.0 / 6.0 = 2.0, 12.0 * 2.0 = 24.0
7 Q K K:
7 K K K:
8 8 8 8:
8 8 8 9:
8 8 8 10:
8 8 8 10 - * -
8.0 - 10.0 = -2.0, 8.0 * -2.0 = -16.0, 8.0 - -16.0 = 24.0
888J:
8 11 * 8 8 * -
8.0 * 11.0 = 88.0, 8.0 * 8.0 = 64.0, 88.0 - 64.0 = 24.0
8 8 8 Q:
88+8/12 *
8.0 + 8.0 = 16.0, 16.0 / 8.0 = 2.0, 2.0 * 12.0 = 24.0
8 8 8 K:
8 8 8 + 13 - *
8.0 + 8.0 = 16.0, 16.0 - 13.0 = 3.0, 8.0 * 3.0 = 24.0
8899:
8 8 9 10:
8891:
8 8 9 11 - * -
9.0 - 11.0 = -2.0, 8.0 * -2.0 = -16.0, 8.0 - -16.0 = 24.0
8 8 9 Q:
8 12 * 9 8 * -
8.0 * 12.0 = 96.0, 9.0 * 8.0 = 72.0, 96.0 - 72.0 = 24.0
8 8 9 K:
8 13 9 - * 8 -
13.0 - 9.0 = 4.0, 8.0 * 4.0 = 32.0, 32.0 - 8.0 = 24.0
8 8 10 10:
8 8 10 J:
8 8 10 Q:
8 8 10 12 - *
10.0 - 12.0 = -2.0, 8.0 * -2.0 = -16.0, 8.0 - -16.0 = 24.0
8 8 10 K:
8 8 / 10 13 + +
8.0 / 8.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
88JJ:
```

```
8810:
8 8 / 11 12 + +
8.0 / 8.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
88JK:
8 8 11 13 + -
11.0 + 13.0 = 24.0, 8.0 - 24.0 = -16.0, 8.0 - -16.0 = 24.0
8 8 0 0:
8 8 12 12 + -
12.0 + 12.0 = 24.0, 8.0 - 24.0 = -16.0, 8.0 - -16.0 = 24.0
8 8 Q K:
12 8 8 / - 13 +
8.0 / 8.0 = 1.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
8 8 K K:
8 9 9 9:
8 9 9 10:
8 9 9 J:
8 9 9 Q:
8 9 12 9 - / *
12.0 - 9.0 = 3.0, 9.0 / 3.0 = 3.0, 8.0 * 3.0 = 24.0
8 9 9 K:
8 9 10 10:
8 9 10 J:
8 9 10 Q:
8 10 + 9 / 12 *
8.0 + 10.0 = 18.0, 18.0 / 9.0 = 2.0, 2.0 * 12.0 = 24.0
8 9 10 K:
8 9 13 10 - / *
13.0 - 10.0 = 3.0, 9.0 / 3.0 = 3.0, 8.0 * 3.0 = 24.0
8 9 J J:
11 8 - 11 * 9 -
11.0 - 8.0 = 3.0, 3.0 * 11.0 = 33.0, 33.0 - 9.0 = 24.0
8 9 J Q:
9 8 11 12 + - -
11.0 + 12.0 = 23.0, 8.0 - 23.0 = -15.0, 9.0 - -15.0 = 24.0
8 9 J K:
98-1113+*
9.0 - 8.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
8 9 0 0:
8 12 9 / 12 * +
8 9 Q K:
8 9 12 13 + - -
12.0 + 13.0 = 25.0, 9.0 - 25.0 = -16.0, 8.0 - -16.0 = 24.0
8 9 K K:
8 10 10 10:
8 10 10 J:
8 10 10 0:
10 8 10 12 + - -
10.0 + 12.0 = 22.0, 8.0 - 22.0 = -14.0, 10.0 - -14.0 = 24.0
8 10 10 K:
8 10 J J:
10 8 11 11 + - -
11.0 + 11.0 = 22.0, 8.0 - 22.0 = -14.0, 10.0 - -14.0 = 24.0
8 10 J Q:
8 10 J K:
8 10 Q Q:
8 12 + 10 / 12 *
8.0 + 12.0 = 20.0, 20.0 / 10.0 = 2.0, 2.0 * 12.0 = 24.0
8 10 Q K:
10 12 13 8 - / *
13.0 - 8.0 = 5.0, 12.0 / 5.0 = 2.4, 10.0 * 2.4 = 24.0
8 10 K K:
8 10 13 13 + - -
13.0 + 13.0 = 26.0, 10.0 - 26.0 = -16.0, 8.0 - -16.0 = 24.0
8 J J J:
8 J J Q:
8 J J K:
8 J Q Q:
11 8 - 12 * 12 -
11.0 - 8.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
8 J O K:
8 1 K K:
8 0 0 0:
8 Q Q K:
8 0 K K:
8 K K K:
9 9 9 9:
9 9 9 10:
999J:
9 9 9 Q:
9 9 + 9 / 12 *
9.0 + 9.0 = 18.0, 18.0 / 9.0 = 2.0, 2.0 * 12.0 = 24.0
9 9 9 K:
9 9 10 10:
9 9 10 J:
9 9 10 Q:
9 9 10 K:
9 9 / 10 13 + +
```

```
9.0 / 9.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
99JJ:
99JQ:
9 9 / 11 12 + +
9.0 / 9.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
99JK:
9 9 11 13 + -
11.0 + 13.0 = 24.0, 9.0 - 24.0 = -15.0, 9.0 - -15.0 = 24.0
9 9 0 0:
9 9 12 12 + -
12.0 + 12.0 = 24.0, 9.0 - 24.0 = -15.0, 9.0 - -15.0 = 24.0
9 9 0 K:
9 13 9 - * 12 -
13.0 - 9.0 = 4.0, 9.0 * 4.0 = 36.0, 36.0 - 12.0 = 24.0
9 9 K K:
9 10 10 10:
9 10 10 J:
9 10 10 Q:
9 10 10 K:
10 9 10 13 + - -
10.0 + 13.0 = 23.0, 9.0 - 23.0 = -14.0, 10.0 - -14.0 = 24.0
9 10 J J:
9 10 J Q:
9 11 + 10 / 12 *
9.0 + 11.0 = 20.0, 20.0 / 10.0 = 2.0, 2.0 * 12.0 = 24.0
9 10 J K:
10 9 - 11 13 + *
10.0 - 9.0 = 1.0, 11.0 + 13.0 = 24.0, 1.0 * 24.0 = 24.0
9 10 Q Q:
10 9 - 12 12 + *
10.0 - 9.0 = 1.0, 12.0 + 12.0 = 24.0, 1.0 * 24.0 = 24.0
9 10 Q K:
9 10 12 13 + - -
12.0 + 13.0 = 25.0, 10.0 - 25.0 = -15.0, 9.0 - -15.0 = 24.0
9 10 K K:
9 1 1 1:
11 9 11 11 + - -
11.0 + 11.0 = 22.0, 9.0 - 22.0 = -13.0, 11.0 - -13.0 = 24.0
9 J J 0:
9 J J K:
9 J Q Q:
11 12 * 9 12 * -
11.0 * 12.0 = 132.0, 9.0 * 12.0 = 108.0, 132.0 - 108.0 = 24.0
9 J 0 K:
9 13 + 12 * 11 /
9.0 + 13.0 = 22.0, 22.0 * 12.0 = 264.0, 264.0 / 11.0 = 24.0
9 J K K:
9 11 13 13 + - -
13.0 + 13.0 = 26.0, 11.0 - 26.0 = -15.0, 9.0 - -15.0 = 24.0
9 Q Q Q:
12 9 - 12 * 12 -
12.0 - 9.0 = 3.0, 3.0 * 12.0 = 36.0, 36.0 - 12.0 = 24.0
9 Q Q K:
9 Q K K:
9 K K K:
10 10 10 10:
10 10 10 J:
10 10 10 Q:
10 10 + 10 / 12 *
10.0 + 10.0 = 20.0, 20.0 / 10.0 = 2.0, 2.0 * 12.0 = 24.0
10 10 10 K:
10 10 / 10 13 + +
10.0 / 10.0 = 1.0, 10.0 + 13.0 = 23.0, 1.0 + 23.0 = 24.0
10 10 J J:
10 10 J O:
10 10 / 11 12 + +
10.0 / 10.0 = 1.0, 11.0 + 12.0 = 23.0, 1.0 + 23.0 = 24.0
10 10 J K:
10 10 11 13 + -
11.0 + 13.0 = 24.0, 10.0 - 24.0 = -14.0, 10.0 - -14.0 = 24.0
10 10 0 0:
10 10 12 12 + -
12.0 + 12.0 = 24.0, 10.0 - 24.0 = -14.0, 10.0 - -14.0 = 24.0
10 10 Q K:
12 10 10 / - 13 +
10.0 / 10.0 = 1.0, 12.0 - 1.0 = 11.0, 11.0 + 13.0 = 24.0
10 10 K K:
10 J J J:
10 J J Q:
11 10 11 12 + -
11.0 + 12.0 = 23.0, 10.0 - 23.0 = -13.0, 11.0 - -13.0 = 24.0
10 J J K:
10 11 11 / 13 + +
11.0 / 11.0 = 1.0, 1.0 + 13.0 = 14.0, 10.0 + 14.0 = 24.0
10 J Q Q:
10 12 + 11 / 12 *
10.0 + 12.0 = 22.0, 22.0 / 11.0 = 2.0, 2.0 * 12.0 = 24.0
10 J Q K:
```

```
10 11 12 13 + - -
12.0 + 13.0 = 25.0, 11.0 - 25.0 = -14.0, 10.0 - -14.0 = 24.0
10 J K K:
10 Q Q Q:
12 12 * 10 12 * -
12.0 * 12.0 = 144.0, 10.0 * 12.0 = 120.0, 144.0 - 120.0 = 24.0
10 0 0 K:
10 12 12 / 13 + +
12.0 / 12.0 = 1.0, 1.0 + 13.0 = 14.0, 10.0 + 14.0 = 24.0
10 Q K K:
10 12 13 13 + - -
13.0 + 13.0 = 26.0, 12.0 - 26.0 = -14.0, 10.0 - -14.0 = 24.0
10 K K K:
10 13 + 13 13 / +
10.0 + 13.0 = 23.0, 13.0 / 13.0 = 1.0, 23.0 + 1.0 = 24.0
JJJJ:
JJJQ:
11 11 + 11 / 12 *
11.0 + 11.0 = 22.0, 22.0 / 11.0 = 2.0, 2.0 * 12.0 = 24.0
JJJK:
11 11 + 11 - 13 +
11.0 + 11.0 = 22.0, 22.0 - 11.0 = 11.0, 11.0 + 13.0 = 24.0
JJQQ:
11 11 12 12 + - -
12.0 + 12.0 = 24.0, 11.0 - 24.0 = -13.0, 11.0 - -13.0 = 24.0
JJQK:
11 11 12 - 13 * -
11.0 - 12.0 = -1.0, -1.0 * 13.0 = -13.0, 11.0 - -13.0 = 24.0
JJKK:
JQQQ:
11 12 + 12 12 / +
11.0 + 12.0 = 23.0, 12.0 / 12.0 = 1.0, 23.0 + 1.0 = 24.0
JQQK:
11 12 + 12 - 13 +
11.0 + 12.0 = 23.0, 23.0 - 12.0 = 11.0, 11.0 + 13.0 = 24.0
10 K K:
11 12 + 13 13 / +
11.0 + 12.0 = 23.0, 13.0 / 13.0 = 1.0, 23.0 + 1.0 = 24.0
JKKK:
11 13 + 13 + 13 -
11.0 + 13.0 = 24.0, 24.0 + 13.0 = 37.0, 37.0 - 13.0 = 24.0
0 0 0 0:
12 12 + 12 + 12 -
12.0 + 12.0 = 24.0, 24.0 + 12.0 = 36.0, 36.0 - 12.0 = 24.0
QQQK:
12 12 12 13 - * -
12.0 - 13.0 = -1.0, 12.0 * -1.0 = -12.0, 12.0 - -12.0 = 24.0
QQKK:
12 12 + 13 + 13 -
12.0 + 12.0 = 24.0, 24.0 + 13.0 = 37.0, 37.0 - 13.0 = 24.0
QKKK:
12 13 13 + * 13 /
13.0 + 13.0 = 26.0, 12.0 * 26.0 = 312.0, 312.0 / 13.0 = 24.0
```