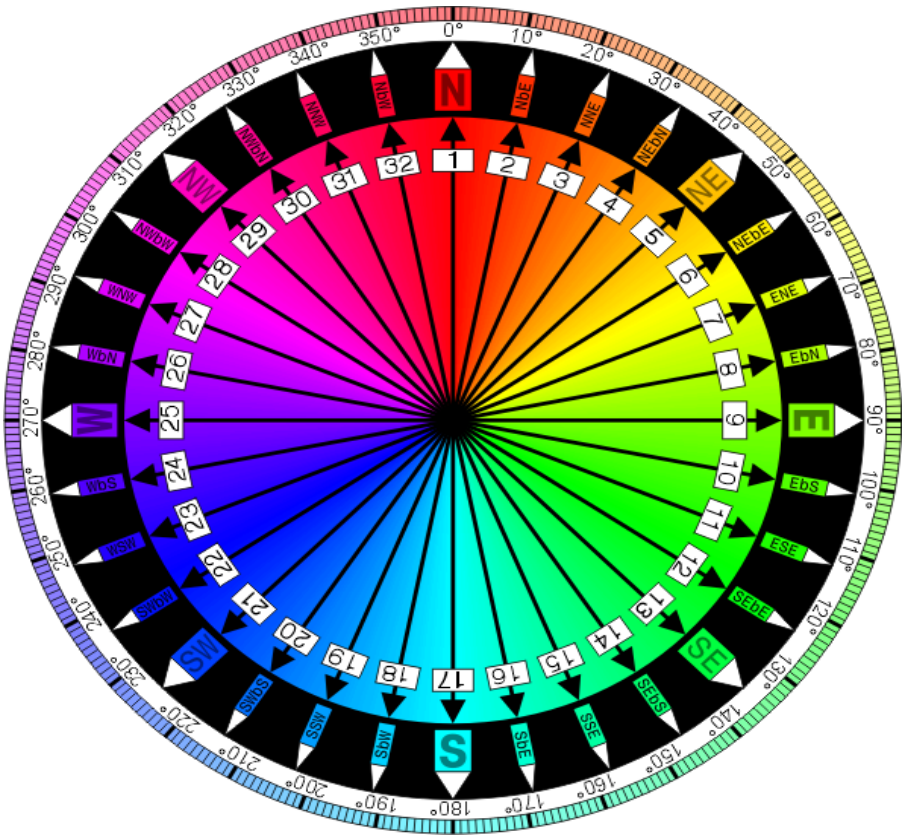
Points of the compass

The 32-point compass is... interesting, to say the least.



Your challenge is to take a degree measure, and convert it into a direction on the 32-point compass.

Each direction is 11.25 (360 / 32) degrees farther than the previous. For example, N (north) is 0 degrees, NbE (north by east) is 11.25 degrees, NNE (north-northeast) is 22.5 degrees, etc.

As for how you're supposed to get the directions,

- 0 degrees is N, 90 degrees is E, 180 degrees is S, and 270 degrees is W.
  - These are called cardinal directions.
- The halfway points between the cardinal directions are simply the cardinal directions they're between concatenated. N or S always go first, and W or E always are second.
  - These are called ordinal directions.
- The halfway points between the cardinal and ordinal directions are the

directions they're between concatenated, again, with a "-" in between. Cardinal directions go first, ordinal second.
    - These are called secondary-intercardinal directions.
- The halfway points between secondary-intercardinal directions and other directions are the other directions "by" the cardinal direction they're closest to (other than the one directly next to them, of course).

If all this explanation hurts your brain, you can refer to this chart:

1	North	N
2	North by east	NbE
3	North-northeast	NNE
4	Northeast by north	NEbN
5	Northeast	NE
6	Northeast by east	NEbE
7	East-northeast	ENE
8	East by north	EbN
9	East	E
10	East by south	EbS
11	East-southeast	ESE
12	Southeast by east	SEbE
13	Southeast	SE
14	Southeast by south	SEbS
15	South-southeast	SSE
16	South by east	SbE
17	South	S
18	South by west	SbW
19	South-southwest	SSW
20	Southwest by south	SWbS
21	Southwest	SW
22	Southwest by west	SWbW
23	West-southwest	WSW
24	West by south	WbS
25	West	W
26	West by north	WbN
27	West-northwest	WNW
28	Northwest by west	NWbW
29	Northwest	NW
30	Northwest by north	NWbN
31	North-northwest	NNW
32	North by west	NbW

Here is a more detailed chart and possibly better explanation of the points of the compass.

Your challenge is to take input in degrees, and output the full name of the compass direction it corresponds to, along with its abbreviation.

Test cases

Input	Output
0	North N
23.97	North-northeast NNE
33.7	Northeast by north NEbN
73.12	East-northeast ENE
73.13	East by north EbN
219	Southwest by south SWbS
275	West W
276	West by north WbN
287	West-northwest WNW

All capitalization must be preserved, as in the test cases. Maximum number of decimal places is 2. All input numbers will be greater than or equal to 0, and less than 360. If a decimal point is present, there will be digits on both sides (you don't have to handle `.1` or `1.`).