P. Jeg kan tælle (1/2)

P-I	A	seks	6
	B	nioghalvtreds	59
	C	treogtyve	23
	D	femoghalvfems	95
	E	toogtres	62
	F	halvfjerds	70
P-2	A	syv	7
	B	fireoghalvtreds	54
	C	enogtyve	21
	D	femogfirs	85
	E	nioghalvfems	99

Danish numbers greater than 10 express the units first, then the tens, linked by og 'and'. Although in the original data only one element (*ni*, 9) is repeated, the pattern can be seen further in the numbers you are asked to translate. For example, you know *tre* is 3 and *toogtyve* is 22, so *treogtyve* shouldn't be too hard to guess.

For most of the answers it is just a matter of decomposing the given examples and reconstructing them.

These numerals can be worked out from data:

	I	2	3	4	5	6	7	8	9
units	en	to	tre	fire	fem	seks	syv		ni
tens		tyve			halvtreds	tres	halvfjerds	firs	

There are two elements not given in the data: 90, and *halvfems*. If we ask for a word not included in the data, it must be the case that you are expected to be able to work it out.

You have to notice a pattern for the tens other than 20: the 'even' tens 60 and 80 are expressed as $n \ge 20$ (cf English score): tre+s 'three score', fir(e)+s 'four score. The 'odd' tens 50 and 70 are expressed as halv ('half (way)') to the next ten. This time the ending -ds is etymologically the ordinal number, so treds (60) is the third score (or 3rd 20), not three score (3x20). It is not completely obvious, because fir+ds becomes fjerds, but not beyond a linguist's imagination.

You should be able to guess that *halvfems* is 90 based on the pattern of 50 and 70 (you might have expected *halvfemds*, but *halvfems* is close enough), i.e. 'half way to the 5th score'.



P. Jeg kan tælle (2/2)

Some more details and curious facts.

The s in 60 and 80 is actually a contraction of *sinds-tyve* i.e. 'times 20'. The archaic word for 60 is *tre-sinds-tyve*, literally 'three score', just like in old English. As mentioned above, the *d* is the ordinal marker, so 70 used to be *halvfjerd-sinds-tyve*.

In modern Danish pronunciation, the *d* in *treds* and *fjerds* is silent, so many people make the mistake of spelling 50 as *halvtres*, as if it were simply *half* way to *tres*, and 70 as *halvtjers*.

Halvfems should be **halvfemts* if the correct spelling of the word for 'fifth' was used. The words for 30 and 40 are *tredive* and *fyrre*, disappointingly not **halvandens* and **tos* that the 'rule' would predict.

The authorities have tried to introduce a decimal counting system for writing cheques etc (*femti, seksti, syvti, ot(te)ti, niti*), but the number names have not caught other than for official use (e.g. on banknotes: it is a tourist's nightmare when the note says *femti kronor* but the shopkeeper says *halvtres kronor*!)

Finally, counting in 20s is not so unusual. As already mentioned, it was not uncommon in English even 150 years ago ("Four score and seven years ago our fathers brought forth on this continent a new nation..."), while French still retains the term *quatre-vingts* 'four twenties' for 80, except in (some parts of) Switzerland, Belgium, and Canada where the terms *huitante* or *octante* are used. Other European languages with (usually partial) **vigesimal** systems include Welsh, Irish and Basque.

* As is traditional in linguistic description, a star preceding a word indicates that it is a hypothetical word not actually occurring. For example you could say "The plural of *child* ought to be **childs*, but it isn't."

Sources:

http://www.olestig.dk/dansk/numbers.html http://fr.wikipedia.org/wiki/80_(nombre)

http://en.wikipedia.org/wiki/Vigesimal

