Auto Multiple Choice - Feature # 405: scoring options (\AMCnumericChoices)

Status:	New	**Priority:**	Normal
Author:	math user	**Category:**	
Created:	02/04/2016	**Assignee:**	
Updated:	02/19/2016	**Due date:**	
Description:	It would be great to extend the scoring options of @\AMCnumericChoices@. Say we have @\AMCnumericChoices{\VQs}{approx=5}@. So VQs is worth 2 points; VQs +/- 5 gives 1 point. Something like @\AMCnumericChoices{\VQs*(-1)}[0.5]@ would be nice: -VQs (wrong sign) gives 0.5 points. @\AMCnumericChoices{-123}[1.5]@ (1.5 points for result -123) and so on ...		

History

02/13/2016 10:42 pm - Chr Sch

- File automultiplechoice.diff added

I was considering the same thing and started hacking the .sty file.

Attached you can find a diff file from the most recent automultiplechoice.sty that gives you the option to add an additional result and give a varying number of points for the additional result.

To stick to the above example:
\AMCnumericChoices{\VQs}{score=2,approx=5,scoreapprox=1,altresult=-\VQs,altscoreexact=0.5,altscoreapprox=0.25,altexact=0,altapprox=5}
So you get points for:
* VQs gives 2 points
* VQs +/- 5 gives 1
* -VQs gives 0.5
* -VQs +/ - 5 gives 0.25

Note that the altexact and altapprox are optional and will take the exact and approx values if they are not filled in. The altscoreexact and altscoreapprox are needed if you want to give some points for the alternative result.
Note that my coding is probably not so clean and there are certainly some ways to improve the diff from the current state, as it is my first time hacking a .sty file.

Feedback is very much welcome!
PS: Thank you a lot for developing AMC!

02/16/2016 03:48 pm - math user
Thanks for this interesting "hack"!

Maybe this could be implemented in AMC?
New options for @\AMCnumericChoices@ (default disabled if result1, result2, result3 not entered):
@result1,scoreexact1,scoreapprox1,exact1,approx1,
result2,scoreexact2,scoreapprox2,exact2,approx2,
result3,scoreexact3,scoreapprox3,exact3,approx3@

This would be quite flexible (points / deduction for rounding errors AND points for approximate results AND points for wrong sign AND points for ...).

I hope someone finds the time to implement this. Thanks for this great software!

02/19/2016 11:12 pm - math user
Maybe @rough@ and @scorerough@ (disabled by default / if no values given) could be added to @\AMCnumericChoices@?
Then the correct result gives full marks (@scoreexact@).

@approx@ might be 1 (rounding errors). So the correct result +/- 1 gives @scoreapprox@ points.

@rough@ might be say 10% of the correct result. The correct result +/- 10% (excluding correct result +/- 1 of course) gives @scorerough@ points.

That would allow sophisticated marking strategies - a clear advantage of automated grading!

Files

automultiplechoice.diff	4.6 kB	02/13/2016	Chr Sch