

C.2 Calculate



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Difficulty: Medium

cisra Puzzle Competition 2007
<http://puzzle.cisra.com.au>

You wake up with a start in the middle of maths 101. Something from your desk separates from your forehead and hits the floor with a *clunk* as you sit up, but there's no time to search for it now – the lecturer is about to rub the board clean.

You add up the numbers, and raise your hand. “Isn’t there a mistake?”

“You mean in 7?” says the lecturer, pausing long enough for you to finish copying it all down into your notebook. “Sadly, no. I wish there was a more elegant way of doing that one, but there isn’t.” She peers closely at you. “Are you alright? Your forehead looks rather... mottled.”

But just then, one of the other students lets out an almighty snore, saving you from instant mortification. Other students are just waking up now, peering around to see what’s going on. It seems that not one student was awake for the vital explanation of the homework. Which is a bummer, because you really need the credit...

Today's Lesson	Homework
$0 = (9 - 4) + (8 - 3) + 1$	$? = 8 - (9 - 4)$
$1 = (8 - 2) - (9 - 3) + (9 - 5)$	$? = 7 + (6 - 5) + (8 - 0)$
$2 = (3 - 1) + (8 - 5)$	$? = (6 - 5) + (8 - 0)$
$3 = (9 - 4) + (8 - 0) + 1$	$? = (8 - 7) + 1$
$4 = (9 - 3) + (8 - 0) + 1$	$? = 0 - 1$
$5 = (3 - 1) + (8 - 2)$	$? = (9 - 5) + (8 - 4) + (8 - 2)$
$6 = 8 - (9 - 5)$	$? = 2 - (9 - 4) - (8 - 6)$
$7 = A - (6 - 5) - (8 - 0)$	$? = 8 - 1$
$8 = 9 + (6 - 5)$	
$9 = (8 - 2) + (8 - 6) + (3 - 1)$	

