



# Magic elfquations



Magic elfquations can transform one type of Christmas decoration into another. The magical transformations are denoted by M. The decoration that the transformation is applied to is put inside brackets and the decoration that the transformation produces is put on the right after an equals sign. Six magical transformations are shown in the table below.

ELFQUATION TABLE

$M(\text{red bow}) = \text{yellow bell}$	$M(\text{holly}) = \text{green gift}$
$M(\text{yellow bell}) = \text{candy cane}$	$M(\text{green gift}) = \text{red bow}$
$M(\text{christmas tree}) = \text{holly}$	$M(\text{candy cane}) = \text{christmas tree}$

For example, the magical transformation can be applied to a to produce a .

Transformations can be composed: since we know  $M(\text{red bow}) = \text{yellow bell}$ , we can write this elfquation that has two transformations:  $M(M(\text{red bow})) = M(\text{yellow bell}) = \text{candy cane}$

## QUESTION

*Which Christmas decoration is produced by this elfquation?*

$$M(M(M(M(M(\text{candy cane}))))))$$

A.



B.



C.



D.



E.



F.

