Problem of the Week #5
(Fall 2017)

(a) Let f and g be functions for which $f \circ g = g$ and $g \circ f = f$. Prove: $f \circ f = f$ and $g \circ g = g$.

(b) Find distinct functions f and g with domain $\mathbb{R}$ for which $f \circ g = g$ and $g \circ f = f$.

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, October 18, 2017.

Every week, the best solution submitted earns a $10 Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck!
You can always see the Problem of the Week (and complete rules) online at: