College Algebra: Quiz #14 (Solutions)

1. Find the inverse of $f(x) = 5x + 3$.

   Solution: If a function has an inverse, we can *sometimes* find it by swapping the roles of x and $f(x)$ and then solving for $f(x)$. In this case, we write our equation as

   $$x = 5f(x) + 3$$

   and then solve for $f(x)$ as

   $$\boxed{f(x) = \frac{x - 3}{5}}$$