W-A1 Algebra 1 12/1

A donut riding a pig (obj) travels 60 (mi/hr).

A Sistine Chapel (obj) traveling 110 (mi/hr)

leaves 5 hours later in the same direction. How long until they smash together?

Headstart: $60 * 5 = 300$ mi

Relative Rate: $110 - 60 = 50$ mi/hr

$\frac{\text{Headstart}}{\text{relative rate}}$ $\frac{300}{50} =$ **6 hrs**

Ori (obj) travels 75 (mi/hr) east and

A 22oz bucket of egg nog (obj) travels 500 (mi/hr) west. If each leaves at the same time, how long until they are 2300 miles apart?

Relative rate $75 + 500$, 575 mi/hr

$\frac{2300}{575} =$ **4 hrs**