

ALGEBRA 2/TRIG-H  
WORD PROBLEMS  
SECTIONS 1.5, 1.6

Date \_\_\_\_\_

Define a variable. Write an equation or inequality you could use to solve the problem. Solve the equation or inequality and state the answer(s) using a complete sentence.

Ex. 1 It took 5 hours driving time to reach your vacation destination. Due to traffic, the average speed for the first part of the trip was 50 mph. The average speed for the second part of the trip was 70 mph. The total distance driven was 280 miles. How many miles were covered driving at 70 mph?

	$r$	$t$	$d$
1st part	50	$(5-x)$	$250-50x$
2nd part	70	$x$	$70x$

$d = rt$

$$70x + 250 - 50x = 280$$
$$70(1.5) = 105$$
$$x = 1.5$$