

Name: _____

TA: _____

Math 11 Pre-Calculus LG 11 Ver A

1. Solve.

a) $\frac{6}{t} + \frac{t}{2} = 4$

b) $\frac{x+2}{3} + \frac{x-4}{4} = 2$

c) $\frac{x-2}{2x+1} = \frac{1}{2} + \frac{x-3}{2x}$

d) $\frac{9}{w-3} - \frac{4}{w-6} = \frac{18}{w^2-9w+18}$

2. Alice is in a 20-km race. She always runs the first half at an average speed of 2 km/h faster than the second half.

a) Let x represent her speed in the first half. Determine a simplified expression in terms of x for the total time needed to run the race. Remember $time = \frac{distance}{speed}$.

b) If Alice runs the first half at 10 km/h, how long will it take her to run the race, to the nearest tenth of an hour?