Math 4B Summer 2020
Quiz #1

No calculators

PRINT NAME

PERM NUMBER

Put your answer in the box provided.

TA: ☐ Trevor ☐ Fabio

Time: ☐ 4:30 ☐ 5:30 ☐ 6:30 ☐ 7:30

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1. Andy is out for a run. The rate at which Andy burns calories depends on the pace of his run – a faster pace burns calories quicker. Let x be his pace, in minutes per kilometer, and $f(x)$ be the rate at which he burns calories (in calories per hour) at pace x.

(a) What are the units of $f'(x)$?

(b) If $f(x) = 240/x$, what is the average rate of change between $x = 8$ and $x = 10$?

Math 4B Summer 2020
Quiz #1b

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No calculators

Put your answer in the box provided.

TA: ☐ Trevor ☐ Fabio

Time: ☐ 4:30 ☐ 5:30 ☐ 6:30 ☐ 7:30

1. Andi is out for a run. The rate at which Andi burns calories depends on the pace of her run – a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and $f(x)$ be the rate at which she burns calories (in calories per hour) at pace x.

(a) What are the units of $f'(x)$?

(b) If $f(x) = 300/x$, what is the average rate of change between $x = 10$ and $x = 15$?