

Grace Wu
PRINT NAME

PERM NUMBER

9835331

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

\downarrow 1.3 \downarrow 1.8 \downarrow 2.8

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0}{5 - 0} = \frac{8.5}{5} = \frac{85}{50}$$

average speed =

$\frac{85}{50}$ ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1} = 1.8$$

speed \approx

4.5 ft/s

$$\begin{aligned} & 2.5(1) + 2.5(0.8) \\ & 2.5 + 2 \\ & = 4.5 \end{aligned}$$

No calculators

Casie Trotter
PRINT NAME

PERM NUMBER

9789702

Put your answer in the

box

provided.

TA: ☐ Garo☐ Sam☒ TrevorTime: ☐ 8am☒ 5pm☐ 6pm☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5}{5} = 1.7$$

average speed =

1.7 ft/s

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{-5.0} \\ 3.5 \end{array}$$

- (b) When was the speed greatest?

$$\begin{array}{r} 7.4 \\ -4.6 \\ \hline 2.8 \end{array} \quad \begin{array}{r} 2.8 \\ -1.5 \\ \hline 1.3 \end{array} \quad \begin{array}{r} 4.6 \\ -2.8 \\ \hline 1.8 \end{array}$$

$$\begin{array}{r} 8.5 \\ -7.4 \\ \hline 1.1 \end{array}$$

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\begin{array}{r} 0.80 \\ 2 \overline{) 1.6} \\ \underline{-1.6} \\ 0 \end{array}$$

$$\begin{array}{r} 2.8 \\ + 1.8 \\ \hline 4.6 \end{array}$$

speed \approx

3.6 ft/s

No calculators

Tyler Gravel
PRINT NAME

PERM NUMBER

9534025

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☒ 9pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0}{5 - 0} = \frac{8.5}{5}$$

average speed = $\frac{8.5}{5}$ ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 5 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 3.3 ft/s

$$\frac{8.5 - 2.8}{5 - 2.5} = \frac{5.7}{2.5}$$

VEDA PARKER
PRINT NAME

PERM NUMBER
9810250

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0.0}{5 - 0} = \frac{8.5}{5} = 1.7$$
$$\frac{(4.6 + 1.1) - 0.0}{1.1} = \frac{5.7}{1.1} \approx 5.18$$
$$\frac{9.6 - 8.5}{1.1} = \frac{1.1}{1.1} = 1$$

average speed = 1 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{4.6 - 2.8}{2 - 1} = \frac{1.8}{1} = 1.8$$

speed \approx 1.8 ft/s

$$\begin{array}{r} 3 \\ 4.6 \\ - 2.8 \\ \hline 1.8 \end{array}$$

Michaela Wong
PRINT NAME

PERM NUMBER
751773

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

~~0.0 + 1.5 + 2.8 + 4.6 + 7.4 + 8.5~~

$$\begin{array}{r} 1.5 \\ + 2.8 \\ + 4.6 \\ \hline 18.9 \\ + 7.4 \\ \hline 26.3 \end{array}$$

$$\begin{array}{r} 16.3 \\ + 8.5 \\ \hline 24.8 \text{ ft} \\ \hline 6 \end{array}$$

average speed = 4.8 ft/s

- (b) When was the speed greatest?

$$\begin{array}{r} 1.5 \\ - 1.0 \\ \hline 0.5 \end{array} \quad \begin{array}{r} 2.8 \\ - 2.0 \\ \hline 0.8 \end{array} \quad \begin{array}{r} 4.6 \\ - 3.0 \\ \hline 1.6 \end{array}$$

During the interval starting at $t =$ 4 secs

$$\begin{array}{r} 7.4 \\ - 4.0 \\ \hline 3.4 \end{array} \quad \begin{array}{r} 8.5 \\ - 5.0 \\ \hline 3.5 \end{array} \quad \begin{array}{r} 34.6 \\ - 2.8 \\ \hline 31.8 \end{array}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

~~2.25~~ ~~2.5~~ ~~2.75~~ ~~3.0~~ ~~3.25~~

speed \approx 3.4 ft/s

~~2.25~~ ~~2.5~~ ~~2.75~~ ~~3.0~~ ~~3.25~~

$$\begin{array}{r} 2.8 \\ + 0.6 \\ \hline 3.4 \end{array}$$

Zach Winter
PRINT NAME

PERM NUMBER
8442659

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0.0}{5} = \frac{8.5}{5} = 1.7$$

$$\frac{24.8}{5} = 4.96$$

average speed = 24.8/5 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{4.6 - 2.8}{2} = \frac{1.8}{2} = 0.9$$

$$0.9 + 2.8 = 3.7$$

speed \approx 3.7 ft/s

No calculators

Megan Graper
PRINT NAME

PERM NUMBER

9661133

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$1.5 + 2.8 + 4.6 + 7.4 + 8.5$$

average speed = 4.96 ft/s

$$\frac{10 + 12 + 28 \text{ feet}}{5 \text{ seconds}}$$

$$\frac{24.8 \text{ feet}}{5 \text{ seconds}} = 4.96 \text{ ft/second}$$

$$\begin{array}{r} 8.5 \\ + 1.5 \\ \hline 10 \end{array} \quad \begin{array}{r} 4.6 \\ + 7.4 \\ \hline 12.0 \end{array}$$

$$\begin{array}{r} 10 \\ + 4.96 \\ \hline 14.96 \\ + 24.80 \\ \hline 39.76 \\ - 20 \downarrow \downarrow \\ \hline 19.76 \\ - 4.80 \\ \hline 14.96 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

$$\frac{7.4 - 4.6}{4 - 3} = \frac{2.8}{1} = 2.8 \text{ seconds}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 6.0 ft/s

$$2.8 \times 0.5 = 1.4$$

$$\begin{array}{r} 4.6 \\ + 1.4 \\ \hline 6.0 \end{array}$$

Genera Dunn
PRINT NAME

PERM NUMBER
8461519

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

$+1.5$ $+1.3$ $+1.8$

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0.0}{5 - 0} = 1.7$$

average speed = 1.7 ft/s

$$\frac{1.1}{1}$$

- (b) When was the speed greatest?

$$0 \rightarrow 1: \frac{1.5 - 0}{1 - 0} = 1.5$$

$$1 \rightarrow 2: \frac{2.8 - 1.5}{2 - 1} = 1.3$$

$$2 \rightarrow 3: \frac{4.6 - 2.8}{3 - 2} = 1.8$$

$$3 \rightarrow 4: \frac{7.4 - 4.6}{4 - 3} = 2.8$$

During the interval starting at $t =$

3 secs

$$\begin{array}{r} 346 \\ 28 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 614 \\ 46 \\ \hline 28 \end{array}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

2.5, 3.4

$$\frac{4.6 - 2.8}{3 - 2} = 1.8$$

speed \approx 1.8 ft/s

Keannalain
PRINT NAME

PERM NUMBER
7847205

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

		1.5	1.3	1.8	2.8	1.1
t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{0 + 1.5 + 2.8 + 4.6 + 7.4 + 8.5}{5} = \frac{24.8}{5}$$

average speed = $\frac{6.5}{5}$ ft/s

$$\begin{array}{r} 1.5 \\ + 8.5 \\ \hline 10.0 \\ + 12.0 \\ \hline 22.0 \\ + 2.8 \\ \hline 24.8 \end{array}$$

$$\begin{array}{r} 4.6 \\ + 7.4 \\ \hline 12.0 \end{array}$$

$$\begin{array}{r} 1.5 \\ + 1.3 \\ \hline 2.8 \\ + 1.8 \\ \hline 4.6 \\ + 2.8 \\ \hline 7.4 \\ + 1.1 \\ \hline 8.5 \end{array}$$

$$\frac{6.5}{5}$$

$$\begin{array}{r} 1.0 \\ 5 \overline{) 6.5} \\ \underline{5.0} \\ 1.50 \end{array}$$

- (b) When was the speed greatest?

$$\begin{array}{r} 2.8 \\ - 1.5 \\ \hline 1.3 \end{array}$$

$$\begin{array}{r} 6.14 \\ - 4.6 \\ \hline 2.8 \end{array}$$

$$\begin{array}{r} 8.5 \\ - 7.4 \\ \hline 1.1 \end{array}$$

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{4.6 - 2.8}{1} =$$

speed \approx 1.8 ft/s

$$\begin{array}{r} 3.16 \\ - 2.8 \\ \hline 1.8 \end{array}$$

Danigra Benitez
PRINT NAME

PERM NUMBER

8247835

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\begin{array}{l} t=0 \quad t=5 \\ 0.0 \text{ ft} \quad 8.5 \text{ ft} \\ \frac{8.5 - 0}{5 - 0} = \frac{8.5}{5} \end{array}$$

$$\boxed{1.7 \text{ ft/s}}$$

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{5} \\ 3.5 \\ \underline{3.5} \\ 0 \end{array}$$

average speed = 1.7 ft/s

- (b) When was the speed greatest?

$$\begin{array}{r} 1.7 \\ 4.6 \\ \underline{2.9} \\ 1.7 \end{array}$$

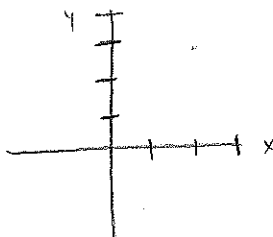
During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\begin{array}{ccc} 0 & 1 & 2 & 3 \\ 0 & 1.5 & 2.8 & 4.6 \\ & 2 & 2.5 & 3 \\ & 2.8 & & 4.6 \end{array}$$

$$\text{SLOPE} = \frac{3-2}{4.6-1.5} = \frac{1}{1.8}$$



speed \approx 2.5/1.8 ft/s

$$\begin{array}{r} 2.5 \\ 4.6 \\ \underline{2.1} \\ 2.5 \end{array}$$

$$\frac{1}{1.8}$$

$$\frac{2.5}{1.8}$$

$$1.388\overline{8}$$

PRINT NAME Justin Kern

PERM NUMBER

7884059

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☒ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed =

1.7

ft/s

$$\frac{8.5}{5-0} = \frac{8.5}{5}$$

In 5 seconds
Went 8.5 ft

$$5 \overline{) 8.5} \quad 1.7$$

- (b) When was the speed greatest?

During the interval starting at $t =$

4

secs

$$\begin{array}{r} 6.1 \\ 7.4 \end{array}$$

$$\begin{array}{r} 4.6 \\ 2.8 \\ 1 \end{array}$$

$$\frac{7.4 - 4.6}{4 - 3} = \frac{2.8}{1} = \frac{f(4) - f(3)}{4 - 3}$$

Biggest increase
between 3 & 4

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx

1.8

ft/s

2.5 is between 2 and 3
In between jump directly

$$\frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1 \text{ sec}} = \frac{f(3) - f(2)}{3 - 2}$$

S = ft/seconds

1.8
Second

TONY YANG
PRINT NAME

PERM NUMBER
8003949

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0}{5 - 0} = 1.7$$

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{35} \end{array}$$

average speed =

1.7 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{1.8 - 1.3}{2} + 1.3 = 1.35$$

speed \approx

1.55 ft/s

ISABELLE SAIGUMBA
PRINT NAME

PERM NUMBER
9405796

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0}{5 - 0} = \frac{8.5}{5}$$

average speed = $8.5 / 5 = 1.7$ ft/s

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{5} \\ 35 \end{array}$$

- (b) When was the speed greatest?

$$\frac{1.5 - 0}{1 - 0} = \frac{1.5}{1} = 1.5$$

$$\frac{2.8 - 1.5}{2 - 1} = \frac{1.3}{1} = 1.3$$

$$\frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1} = 1.8$$

During the interval starting at $t =$

3 secs

$$\frac{7.4 - 4.6}{4 - 3} = \frac{2.8}{1} = 2.8$$

$$\frac{8.5 - 7.4}{5 - 4} = \frac{1.1}{1} = 1.1$$

3 → 4 SECONDS
GREATEST SPEED

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 3.7 ft/s

BETWEEN 2 → 3
2.5

$$\begin{array}{r} 1.8 \\ 2 \overline{) 3.6} \\ \underline{3.6} \\ 0 \end{array}$$

$$\begin{array}{r} 1.8 \\ 2 \overline{) 3.6} \\ \underline{3.6} \\ 0 \end{array}$$

$$\begin{array}{r} 1.8 \\ 2 \overline{) 3.6} \\ \underline{3.6} \\ 0 \end{array}$$

No calculators

Karla Hernandez Leyva
PRINT NAME

PERM NUMBER

945760-7

Put your answer in the	box	provided.
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TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$1.5 + 1.4 + 1.53 + 1.85 + 1.70$$

$$2.9 + 3.38 + 1.70$$

average speed = 15960 ft/s

$$6.28 + 1.70 \rightarrow \frac{7.98}{5} = 1.596$$

- (b) When was the speed greatest?

$$\begin{array}{r} 1.98 \\ 5 \overline{) 9.94} \\ \underline{5} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

During the interval starting at $t =$

4 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\begin{array}{r} 1.53 - 1.4 \\ \hline .13 \end{array}$$

speed \approx

1.3 ft/s

Math 34A Winter 2020
 Quiz #4c
 No calculators

Grace Cain!
 PRINT NAME

PERM NUMBER
 9367517

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed = 1.7 ft/s

$5 - 0 = 5$
 $8.5 - 0.0 = 8.5$
 $\frac{8.5}{5} = 1.7$

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx .36 ft/s

$4.6 - 2.8 = 1.8$
 $\frac{1.8}{5} = 0.36$

Alinta Tadesse
PRINT NAME

PERM NUMBER
8045064

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{dt}{dx} = \frac{8.5 - 0}{5 - 0} = \frac{8.5}{5} = 1.7$$

$$5 \overline{) 8.5}$$

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{5} \\ 35 \end{array}$$

average speed =

1.7 ft/s

- (b) When was the speed greatest?

$$\begin{array}{r} 2.8 \\ -1.5 \\ \hline 1.3 \end{array} \quad \begin{array}{r} 4.6 \\ -2.8 \\ \hline 1.8 \end{array} \quad \begin{array}{r} 7.4 \\ -4.6 \\ \hline 2.8 \end{array} \quad \begin{array}{r} 8.5 \\ -7.4 \\ \hline 1.1 \end{array}$$

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

≈ 1.8

speed \approx

1.8 ft/s

Samatar ESSA
PRINT NAME

PERM NUMBER

8047599

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\begin{array}{r} 5 \overline{) 8.5} \\ \underline{5} \\ 3.5 \end{array}$$

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{8.5} \\ 0 \end{array}$$

average speed = 1.7 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{f(3) - f(2)}{3 - 2} = \frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1} = 1.8$$

$$\frac{f(2.5) - f(2)}{2.5 - 2} = \frac{4.6 - 2.8}{2.5 - 2} = \frac{1.8}{0.5} = 3.6$$

$$\frac{f(3) - f(2.5)}{3 - 2.5} = \frac{4.6 - 2.8}{3 - 2.5} = \frac{1.8}{0.5} = 3.6$$

speed $\approx \frac{1.8 - f(2.5)}{2.5}$ ft/s

Angel Solares
PRINT NAME

PERM NUMBER
9821265

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☐ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed = *4.67* ft/s

Handwritten calculation for average speed:

$$\begin{array}{r} 1.5 \\ 2.8 \\ 4.6 \\ 7.4 \\ 8.5 \\ \hline 24.8 \end{array}$$

Then:

$$\begin{array}{r} 4.67 \\ 24.8 \\ - 20 \\ \hline 4.8 \\ 143 \\ \hline \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ *3.4* secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx *3.7* ft/s

No calculators

PRINT NAME

Dj Scott

PERM NUMBER

8052102

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

$\sqrt{5}$ $\sqrt{5}$ $\sqrt{5}$ $\sqrt{5}$ $\sqrt{5}$ $\sqrt{5}$

- (a) What was the average speed during the five seconds?

$$\frac{8.5 - 0.0}{5 - 0} = \frac{8.5}{5} = 1.7$$

$$\begin{array}{r} 1 \\ 15.9 \\ + 27.4 \\ \hline 43.3 \end{array}$$

$$\begin{array}{r} 8.5 > 15.9 > 23.3 \\ + 17.4 > 41.6 > 59.0 \\ + 22.8 > 74.4 > 96.8 \\ + 11.5 > 85.9 > 107.4 \\ \hline 24.8 \end{array}$$

average speed =

4.96 ft/s

$$\begin{array}{r} 4.96 \\ 5 \overline{) 24.80} \\ \underline{20.0} \\ 4.80 \\ \underline{4.50} \\ 30 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$

3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx

ft/s

$$\frac{4.6 - 0}{3 - 2.5} = \frac{4.6}{0.5} = 9.2$$

$$\frac{4.6}{0.5} = 9.2$$

$$\frac{4.6}{0.5} = 9.2$$

No calculators

Alejandra Anguiano
PRINT NAME

PERM NUMBER

7811235

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{1.8}{1}$$

average speed = 1.7 ft/s

$$\frac{\text{distance} - 0}{\text{time} - 0}$$

$$\begin{array}{r} 8.5 \\ 5 \overline{) 8.5} \\ \underline{-5.0} \\ 3.5 \\ \underline{-3.5} \\ 0 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 4 secs

$$\begin{array}{r} 1.8 \\ 4 \overline{) 7.4} \\ \underline{-4.0} \\ 3.4 \end{array}$$

$$\begin{array}{r} 1.1 \\ 3 \overline{) 4.6} \\ \underline{-3.0} \\ 1.6 \end{array}$$

$$\begin{array}{r} 1.4 \\ 2 \overline{) 2.8} \\ \underline{-2.8} \\ 0 \end{array}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$t = 2.5$$

$$s = ?$$

$$x = 3.2$$

$$d = s \cdot t$$

$$\begin{array}{r} 3.2 \\ 2.5 \end{array}$$

$$\begin{array}{r} 34.616 \\ -2.8 \\ \hline 3.2 \end{array}$$

speed \approx $\frac{3.2}{2.5}$ ft/s

No calculators

CAI, JULIE
PRINT NAME

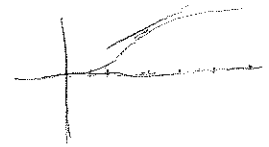
PERM NUMBER

3479318

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5



- (a) What was the average speed during the five seconds?

$$\frac{8.5}{5} = 1.7 \text{ ft/s}$$

average speed = 1.7 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 2 ft/s

No calculators

Melissa Maldonado
 PRINT NAME

PERM NUMBER

8106502

Put your answer in the box provided.
 TA: ☐ Garo ☒ Trevor
☐ Sam

 Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed = 1.7 ft/s

$$\begin{array}{r}
 1.7 \\
 5 \overline{) 8.5} \\
 \underline{5} \\
 35
 \end{array}$$

$$\begin{array}{r}
 2 \\
 8.5 \\
 7.4 \\
 \underline{4.6} \\
 2.9 \\
 \underline{1.5} \\
 23.8
 \end{array}$$

$$\begin{array}{r}
 1.7 \\
 15 \overline{) 23.8} \\
 \underline{15} \\
 8.8
 \end{array}$$

- (b) When was the speed greatest?

 During the interval starting at $t =$ 4 secs

$$\begin{array}{r}
 1.50 \\
 1 \overline{) 1.50} \\
 \underline{1} \\
 .50
 \end{array}$$

$$\begin{array}{r}
 1.40 \\
 2 \overline{) 2.80} \\
 \underline{2} \\
 .80
 \end{array}$$

$$\begin{array}{r}
 1.5 \\
 3 \overline{) 4.6} \\
 \underline{3} \\
 16
 \end{array}$$

$$\begin{array}{r}
 1.8 \\
 4 \overline{) 7.4} \\
 \underline{4} \\
 34
 \end{array}$$

$$\begin{array}{r}
 1.7 \\
 5 \overline{) 8.5} \\
 \underline{5} \\
 35
 \end{array}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 3.7 ft/s

$$\begin{array}{r}
 4.6 \\
 2.8 \\
 \underline{1.8} \\
 1.8
 \end{array}$$

$$\begin{array}{r}
 (2, 2.8) \quad (3, 4.6) \\
 \frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1} = 1.8
 \end{array}$$

$$\begin{array}{r}
 2.8 \\
 .9 \\
 \underline{1.8} \\
 3.7
 \end{array}$$

$$\begin{array}{r}
 2.8 \\
 1.8 \\
 \underline{4.6}
 \end{array}$$

No calculators

Grant Jamison
PRINT NAME

PERM NUMBER

6870588

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{-5} \\ 35 \\ \underline{-35} \\ 0 \end{array}$$

average speed = 1.7 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 2 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{f(x - \Delta x) - f(x)}{\Delta x} \Rightarrow$$

$$\frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1}$$

$$\frac{1.8 - 1 - 1.8}{1}$$

speed \approx 1 ft/s

Omar Tawil
PRINT NAME

PERM NUMBER
9480724

No calculators

Put your answer in the box provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☒ 6pm
☐ 5pm ☐ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

1.5 1.3 1.6 2.8 1.1

$$\begin{array}{r} 3.16 \\ 4.6 \\ - 2.8 \\ \hline 1.8 \end{array} \quad \begin{array}{r} 7.4^{14} \\ 4.6 \\ - 2.8 \\ \hline 2.8 \end{array}$$

$$\begin{array}{r} 2.8 \\ + 0.9 \\ \hline 3.7 \end{array}$$

- (a) What was the average speed during the five seconds?

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{5} \\ 35 \end{array}$$

average speed =

1.7 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

~~0~~ 3 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{1.8 + 1.3}{2} = \frac{3.1}{2}$$

speed \approx

~~1.55~~ 1.55 ft/s

No calculators

Adam Ernster
PRINT NAME

PERM NUMBER

7344609

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☐ 5pm ☒ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed = 4.12 ft/s

$$\begin{array}{r}
 1.5 \\
 + 2.8 \\
 \hline
 5.3
 \end{array}
 \quad
 \begin{array}{r}
 5.3 \\
 + 4.6 \\
 \hline
 9.9 \\
 \div 2.4 \\
 \hline
 4.12
 \end{array}
 \quad
 \begin{array}{r}
 9.9 \\
 + 7.7 \\
 \hline
 17.6
 \end{array}
 \quad
 \begin{array}{r}
 17.6 \\
 + 8.5 \\
 \hline
 26.1
 \end{array}$$

$$\begin{array}{r}
 5 \overline{) 26.1} \\
 \underline{-20} \\
 6.1 \\
 \underline{-6} \\
 .1
 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 5 secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx 3 ft/s

$$\begin{array}{r}
 2.8 \\
 + 4.6 \\
 \hline
 7.4
 \end{array}
 \quad
 \begin{array}{r}
 3 \\
 2.5 \overline{) 7.5} \\
 \underline{5.0} \\
 2.5
 \end{array}$$

2.5

PRINT NAME

CHENGYU YIN

PERM NUMBER

9753153

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☐ 5pm ☒ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

$$\frac{8.5}{5} = 1.7 \text{ ft/s}$$

average speed =

1.7

ft/s

- (b) When was the speed greatest?

~~0-1~~ 1.5

1-2

~~2-3~~ 1.3~~3-4~~

2-3 1.8

3-4 2.8

4-5 1.1

During the interval starting at $t =$

3

secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{2.8 - 1.5}{1} = 1.3$$

$$\frac{4.6 - 2.8}{1} = 1.8$$

$$\frac{2.8 - 1.5}{1} = \frac{1.3}{1} = 1.3$$

$$\frac{4.6 - 2.8}{1} = 1.8$$

speed \approx

1.8

ft/s

$$\frac{4.6 - 2.8}{1} = 1.8$$

$$\frac{4.6 - 2.8}{1} = \frac{1.8}{1} = 1.8$$

No calculators

PRINT NAME

Taylor Mori

PERM NUMBER

8236176

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☐ 5pm ☒ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

$$\begin{array}{r} 2.8 \\ -1.5 \\ \hline 1.3 \end{array}$$

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

$$\begin{array}{r} 14.6 \\ -2.8 \\ \hline 11.8 \end{array}$$

$$\begin{array}{r} 8.5 \\ -4.6 \\ \hline 3.9 \end{array}$$

$$\begin{array}{r} 8.5 \\ -7.4 \\ \hline 1.1 \end{array}$$

- (a) What was the average speed during the five seconds?

$$\begin{array}{r} 1.7 \\ 5 \overline{) 8.5} \\ \underline{5} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

$$\frac{8.5}{5} = 1.7$$

average speed = 1.7 ft/s

- (b) When was the speed greatest?

$$t=3, t=4$$

During the interval starting at $t =$ 3

secs

$$\frac{7.4 - 4.6}{4 - 3} = 2.8 \text{ ft/s}$$

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

$$\frac{2.8 - 1.5}{2 - 1} = 1.3$$

$$\begin{array}{r} 2.8 \\ +0.5 \\ \hline 3.3 \end{array}$$

speed \approx 3.3

ft/s

$$\frac{x - 2.8}{2.5 - 2} \rightarrow$$

$$x - 2.8 = 2.5 - 2$$

$$x - 2.8 = 0.5$$

$$x = 3.3$$

PRINT NAME Leonardo

PERM NUMBER

961381-1

No calculators

Put your answer in the

box

provided.

TA: ☐ Garo ☒ Trevor
☐ Sam

Time: ☐ 8am ☐ 6pm
☐ 5pm ☒ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

- (a) What was the average speed during the five seconds?

average speed =

2.02 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

3

secs

- (c) Estimate the speed of the particle at $t = 2.5$ seconds.

speed \approx

3.7

ft/s

No calculators

Kristen Venegas
PRINT NAME

PERM NUMBER

8043036

Put your answer in the box provided.TA: ☐ Garo ☒ Trevor
☐ SamTime: ☐ 8am ☐ 6pm
☐ 5pm ☒ 7pm

1. The table below shows the position of a point on the x -axis during the time interval $0 \leq t \leq 5$ where x is measured in feet and t in seconds.

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.5	2.8	4.6	7.4	8.5

$$S = \frac{d}{t} \quad \frac{7.9}{4}$$

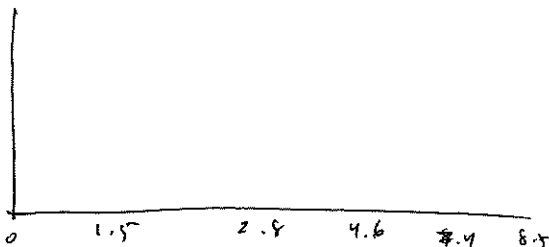
$$3 \overline{) 11.6}$$

- (a) What was the average speed during the five seconds?

$$\frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{f(x - \Delta x) - f(x)}{\Delta x}$$

$$t = 2 = 1.9$$

average speed = 1.0 ft/s

- (b) When was the speed greatest?

$$4 \overline{) 7.7}$$

$$\begin{array}{r} 1.9 \\ - 7.6 \\ \hline 0.1 \end{array}$$

$$3 \overline{) 4.60}$$

$$\begin{array}{r} 1.53 \\ - 4.59 \\ \hline 0.01 \end{array}$$

$$5 \overline{) 8.5}$$

$$\begin{array}{r} 1.7 \\ - 8.5 \\ \hline 0.0 \end{array}$$

$$t = 1 = 1.5$$

$$t = 2 = 1.9$$

During the interval starting at $t =$ / secs

$$2 \overline{) 2.8} = 1.4$$

$$3 \overline{) 9.6}$$

$$\begin{array}{r} 3.2 \\ - 9.6 \\ \hline 0.0 \end{array}$$

- (c) Estimate the speed of the particle at ~~2.5~~ seconds.

$$\begin{array}{l} x \quad y \\ (2, 2.8) \\ (3, 4.6) \\ x_2 \quad y_2 \end{array}$$

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{4.6 - 2.8}{3 - 2} = 1.8$$

$$\frac{4.6 - 2.8}{3 - 2} = \frac{1.8}{1}$$

speed \approx 5.3 ft/s

$$y = 1.8x + b$$

$$2.8 = 1.8(2) + b$$

$$2.8 = 3.6 + b$$

$$\begin{array}{r} 2.8 \\ - 3.6 \\ \hline -0.8 = b \end{array}$$

$$\begin{array}{r} 2 \\ - 3.6 \\ + 2.8 \\ \hline -0.8 = b \end{array}$$

$$y = 1.8(2.5) + 0.8$$