

No calculators

Claire Sellich
PRINT NAME

PERM NUMBER

7967748

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0}{5 - 0} = 6\frac{1}{2} \times \frac{1}{5} = \frac{13}{2} \times \frac{1}{5} = \frac{13}{10} \text{ ft/s or } 1.3 \text{ average speed} = \boxed{13/10} \text{ ft/s}$$

- (b) When was the speed greatest?

$$\frac{2.9 - 1.3}{2 - 1} = 1.6 \text{ ft/s}$$

During the interval starting at $t =$ 1 secs

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

$$\frac{4.1 - 2.9}{3 - 2} = 1.2 \text{ ft/s}$$

speed \approx 3 ft/s

$$x(2.5) = 1.2(2.5) = 3 \text{ ft/s}$$

No calculators

Andrew lugo
PRINT NAME

PERM NUMBER

8237836

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	1.3	2.9	4.1	5.3	6.5

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

1.3, 1.6, 1.2, 1.2, 1.2

average speed = 1.26 ft/s

$$\begin{array}{r} 2.9 \\ 1.3 \\ \hline 1.6 \end{array} \quad \begin{array}{r} 3.1 \\ 1.1 \\ \hline 2.0 \end{array}$$

$$\begin{array}{r} 1.2 \\ 1.2 \\ 1.2 \\ \hline 3.6 \\ 1.6 \\ \hline 5.2 \end{array}$$

$$\begin{array}{r} 1.26 \\ 5 \overline{) 6.30} \\ \underline{5} \\ 13 \\ \underline{10} \\ 30 \end{array}$$

- (b) When was the speed greatest?

$$\begin{array}{r} 1.26 \\ 1.00 \\ \hline 0.06 \\ 0 \end{array}$$

During the interval starting at $t =$ 1 secs

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

speed \approx 1.2 ft/s

No calculators

Beau Karnsritthong
PRINT NAME

PERM NUMBER

3547056

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	1.3	2.9	4.1	5.3	6.5

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

average speed = 6.5 / 5 ft/s

$$\frac{\Delta x}{\Delta t} = \frac{6.5 - 0.0}{5 - 0} = \frac{6.5}{5}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 1 secs

$$\begin{array}{l} 0 \rightarrow 0.0 > 1.3 \\ 1 \rightarrow 1.3 > 1.6 \\ 2 \rightarrow 2.9 > 1.2 \\ 3 \rightarrow 4.1 > 1.2 \\ 4 \rightarrow 5.3 > 1.2 \\ 5 \rightarrow 6.5 > 1.2 \end{array}$$

$$\frac{2.9 - 1.3}{2 - 1} = \frac{1.6}{1} = 1.6 \text{ ft/s}$$

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

speed \approx 1.2 ft/s

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} \approx 1.2$$

$$\begin{array}{l} 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \\ \approx 1.2 \text{ ft/s} \end{array}$$

No calculators

PRINT NAME

Riya Singh

PERM NUMBER

7843121

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	1.3	2.9	4.1	5.3	6.5

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

$$\bar{s}_{\text{sec}} = 6.5 \text{ ft}$$

$$\begin{array}{r} 2.9 \\ -1.3 \\ \hline 1.6 \end{array} \quad \begin{array}{r} 6.5 \\ -5.3 \\ \hline 1.2 \end{array}$$

average speed =

1.4 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

16 ft/s

No calculators

Omlar Hanamsager
PRINT NAME

PERM NUMBER

826 0317

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0}{5 - 0} = \frac{6.5}{5}$$

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5} \\ 1.5 \\ \underline{1.5} \\ 0 \end{array}$$

average speed =

1.3 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

secs

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

speed \approx

3.5 ft/s

No calculators

Isabel McGreen

PRINT NAME

PERM NUMBER

7776370

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0}{5}$$

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

average speed = 1.3 ft/s

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

 $\approx 1.3?$

- (b) When was the speed greatest?

During the interval starting at $t =$ 1

secs

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

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1}$$

speed \approx 1.2 ft/s

No calculators

Kassie Smiggs
PRINT NAME

PERM NUMBER

8017995

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0}{5 - 0} = \frac{6.5}{5} = \frac{13}{10} = \frac{1.3}{1}$$

average speed =

1.3

ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ $1 \leq t \leq 2$

secs

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

$$\frac{2.5}{1.1} \approx 2.27$$

speed \approx

2.5 / 1.1

ft/s

No calculators

PRINT NAME

Olivia Feller

PERM NUMBER

9015226

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	1.3	2.9	4.1	5.3	6.5

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

$$\begin{array}{r}
 6.5 \\
 5.3 \\
 4.1 \\
 2.9 \\
 1.3 \\
 \hline
 20.1 \text{ ft} \\
 \hline
 20.1 \text{ ft} / 5 \text{ sec}
 \end{array}$$

average speed =

4.1

ft/s

- (b) When was the speed greatest?

$$\begin{array}{r}
 6.5 \\
 -5.3 \\
 \hline
 1.2
 \end{array}
 \quad
 \begin{array}{r}
 5.3 \\
 -4.1 \\
 \hline
 1.2
 \end{array}$$

During the interval starting at $t =$

1

secs

$$\begin{array}{r}
 5.3 \\
 -4.1 \\
 \hline
 1.2
 \end{array}
 \quad
 \begin{array}{r}
 4.1 \\
 -2.9 \\
 \hline
 1.2
 \end{array}
 \quad
 \begin{array}{r}
 2.9 \\
 -1.3 \\
 \hline
 1.6
 \end{array}$$

 $t = 1$ to $t = 2$

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

$$\begin{array}{r}
 4.1 \quad t=3 \\
 -2.9 \quad t=2 \\
 \hline
 1.2 \text{ ft} \\
 \hline
 1.2 \text{ ft} / .5 = .6
 \end{array}$$

speed \approx

3.5

ft/s

$$\begin{array}{r}
 1 \quad 2.9 \\
 + .6 \\
 \hline
 3.5
 \end{array}$$

No calculators

Maya SchraU
PRINT NAME

PERM NUMBER

3347010

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{f(5) - f(0)}{5 - 0} = \frac{6.5 - 0}{5} = \frac{6.5}{5}$$

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

$$\frac{f(x_2) - f(x_1)}{\Delta x}$$

- (b) When was the speed greatest?

$$\frac{2.9 - 1.3}{2 - 1} = \frac{1.6}{1}$$

During the interval starting at $t =$ 1 secs

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

$$\frac{4.1 - 2.9}{2.5 - 2} = \frac{1.2}{0.5}$$

$$\begin{array}{r} 1.2 \\ 2.5 \\ \hline 6.0 \\ 2.40 \\ \hline 3.00 \end{array}$$

speed \approx 3 ft/s

No calculators

PRINT NAME Jessica Swaine

PERM NUMBER

7892334

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	1.3	2.9	4.1	5.3	6.5

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

average speed = 4.02 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.

speed \approx 1.6 ft/s

No calculators

Clay Clifton
PRINT NAME

PERM NUMBER

6993404

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{(5-0)^2}{4}$$

average speed = 4.2 ft/s

$$\frac{25}{4}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 1 secs

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

speed \approx $\frac{4.05}{0.5}$ ft/s

$$\frac{(2.5-2)^2}{0.5}$$

$$(2.5-2)(2.5-2)$$

$$\frac{12.05 - 5 - 5 + 4}{0.5}$$

$$0.5 \sqrt{6.05}$$

$$\frac{1}{2} \cdot \frac{2}{5.0}$$

$$\frac{1}{2} \cdot \frac{2.5}{5.0}$$

$$\frac{1}{2} \cdot \frac{12.5}{5.0}$$

$$\frac{1}{2} \cdot \frac{12.5}{5.0}$$

No calculators

Marvin Salamanca
PRINT NAME

PERM NUMBER

9706342

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.

	x 1.3	y 1.6	1.2	1.2	1.2	
t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.3	2.9	4.1	5.3	6.5

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

$$\frac{1.3 - 0}{1 - 0} = 1.3$$

$$\frac{2.9 - 1.3}{1.6 - 1.0} = 1.111$$

$$\frac{-2.9}{1.2}$$

average speed = 1.3 ft/s

$$\begin{array}{r} \times 1.2 \\ 3 \\ \hline 3.6 \\ + 1.3 \\ \hline 4.9 \\ + 1.6 \\ \hline 6.5 \end{array}$$

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

- (b) When was the speed greatest?

$$\begin{array}{r} 0.6 \\ 2 \overline{) 1.2} \\ \underline{12} \\ 0 \end{array}$$

$$\begin{array}{r} 2.4 \\ + 0.6 \\ \hline 3.5 \end{array}$$

During the interval starting at $t =$ 1 secs

$$\begin{array}{r} 2.5 \\ - 2.9 \\ \hline 0 \end{array}$$

$$\begin{array}{r} y_2 \quad y_1 \\ 1.3 - 0 \end{array}$$

$$\frac{3.5 - 2.9}{2.5 - 2} = \frac{0.6}{0.5}$$

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

$$\frac{x - 2.9}{2.5 - 2}$$

$$2.5 -$$

$$2 -$$

$$\frac{x - 2.9}{2.5 - 2}$$

$$\frac{x - 2.9}{0.5}$$

speed \approx 2.4 ft/s

$$\begin{array}{r} 1.2 \\ \times 2 \\ \hline 2.4 \end{array}$$

$$\begin{array}{r} \times 2.222 \dots 0.5 \\ + 2.9 \end{array}$$

No calculators

Luisa Sanchez
PRINT NAME

PERM NUMBER

825 2496

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	1.3	2.9	4.1	5.3	6.5

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

5 seconds = 6.5 feet

average speed = 1.3 ft/s

$$0 \leq t \leq 5 \quad \frac{6.5 - 0.0}{5 - 0} = \frac{6.5}{5} = 1.3$$

- (b) When was the speed greatest?

During the interval starting at $t =$ [1 → 2] secs

$\frac{2.9}{1.3} = 1.6$ $\frac{2.9}{1.2} = 2.4$ (high)
 $\frac{5.3}{4.1} = 1.3$ $\frac{5.3}{1.8} = 2.9$ (high)
 going from the first second to second

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

 $t = 2.5$ secspeed \approx 1.2 ft/s

$$\frac{2.5}{1.3} = 1.9$$

$$\frac{4.1 - 2.9}{2 - 1} = 1.2$$

No calculators

Vynnam
PRINT NAME

PERM NUMBER

7923949

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.

0 → 1 1 → 2 3 → 4
1.3 ft/s 1.6 ft/s 1.2 ft/s

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.3	2.9	4.1	5.3	6.5

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

$$r = \frac{d}{t} = \frac{6.5 \text{ ft}}{5 \text{ secs}}$$

$$\frac{1.3}{1.5}$$

average speed = 1.3 ft/s

- (b) When was the speed greatest?

$$\frac{2.9 - 1.3}{2 - 1} = 1.6 \text{ ft/s}$$

During the interval starting at $t =$ 1 secs

$$\frac{2.9}{1.3} = 1.6$$

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

$$\frac{4.1 - 2.9}{3 - 2} = 1.2 \text{ ft/s}$$

speed \approx 1.2 ft/s

No calculators

Ana Turner
PRINT NAME

PERM NUMBER

6402349

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	1.3	2.9	4.1	5.3	6.5

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

average speed = 1.3 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.

speed \approx 3.25 ft/s

No calculators

Natalie Diaz
PRINT NAME

PERM NUMBER

9440876

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0.0}{5 - 0} = \frac{6.5}{5}$$

$$\frac{6.5}{5} = 1.3$$

average speed = 1.3 ft/s

$$\frac{6.5 - 1.3}{4} = \frac{5.2}{4}$$

$$\frac{5.2}{4} = 1.3$$

- (b) When was the speed greatest?

$$\frac{6.5 - 5.3}{1} = \frac{1.2}{1}$$

During the interval starting at $t =$ 2 secs

$$\frac{2.9 - 1.3}{1} = \frac{1.6}{1}$$

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

$$\frac{4.1 - 2.9}{0.5} = \frac{1.2}{0.5}$$

speed \approx 1.2 ft/s

$$\frac{4.1 - 2.9}{0.5} = \frac{1.2}{0.5}$$

$$\frac{4.1 - 3.5}{0.5} = \frac{0.6}{0.5}$$

$$\frac{5.3 - 3.5}{1.5} = \frac{1.8}{1.5}$$

$$\frac{5.3 - 4.1}{1.5} = \frac{1.2}{1.5}$$

No calculators

David Cecilia-Hernandez
PRINT NAME

PERM NUMBER

9571092

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	1.3	2.9	4.1	5.3	6.5

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

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5} \\ 15 \end{array}$$

average speed = 1.3 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$ 1 secs

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

$$f(2.5) - f(2)$$

$$\frac{2.5 - 2}{0.5}$$

speed \approx 1 ft/s

No calculators

Brandon Jordan
PRINT NAME

PERM NUMBER

7883283

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	1.3	2.9	4.1	5.3	6.5

 $f(t) = x$

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

$$f(5) = 6.5$$

$$\frac{ft}{s}$$

1.3 1.6 1.2 1.2 1.2

↑ greatest speed

2.9 4.1

1.2 1.2

average speed =

1.3

ft/s

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5} \\ 1.5 \\ \underline{1.5} \\ 0 \end{array}$$

$$\begin{array}{r} 1 \\ 4 \overline{) 5.3} \\ \underline{4} \\ 1.3 \end{array}$$

- (b) When was the speed greatest?

$$\begin{array}{l} t=1 \quad t=2 \\ 1.3 \rightarrow 2.9 \\ = 1.6 \end{array}$$

[greatest Rate of Change

During the interval starting at $t =$

2

secs

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

$$\begin{array}{l} f(2) = 2.9 \quad f(3) = 4.1 \\ x \approx 1.2 \end{array}$$

$$\begin{array}{r} 1 \\ 2.9 \\ +0.6 \\ \hline 3.5 \end{array}$$

speed \approx

3.5

ft/s

No calculators

Alexa Lopez
PRINT NAME

PERM NUMBER

8251738

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	1.3	2.9	4.1	5.3	6.5

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

$$\text{speed} = \text{distance} \times \text{time}$$

$$\text{speed} : 0, 1.3, 5.8, 12.3, 21.2, 32.5$$

*to find average,
add them all up
then divide by
how many there are

$$\begin{array}{r} 8.6 \\ 6 \overline{) 52.0} \\ \underline{48} \\ 40 \\ \underline{36} \\ 4 \end{array}$$

average speed = 8.66 ft/s

$$\begin{array}{r} 2.9 \\ \times 2 \\ \hline 5.8 \end{array}$$

$$\begin{array}{r} 4.1 \\ \times 3 \\ \hline 12.3 \\ 5.3 \\ \hline 21.2 \end{array}$$

$$\begin{array}{r} 6.5 \\ \times 5 \\ \hline 32.5 \end{array}$$

$$\begin{array}{r} 1.3 \\ + 5.8 \\ \hline 7.1 \\ + 12.3 \\ \hline 19.4 \\ + 21.2 \\ \hline 40.6 \\ + 32.5 \\ \hline 72.0 \end{array}$$

- (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.

$$\begin{array}{l} t = 2 \\ t = 3 \end{array}$$

$$\begin{array}{r} 3.4 + 11 \\ - 2.9 \\ \hline 1.2 \end{array}$$

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2 \quad \leftarrow \text{to find at } 2.5$$

*then add
to 2.9

$$\begin{array}{r} 2.9 \\ + 0.6 \\ \hline 3.5 \end{array}$$

speed \approx 3.5 ft/s

No calculators

Dylan Lockwood
PRINT NAME

PERM NUMBER

7952195

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	1.3	2.9	4.1	5.3	6.5

feet
time

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

$$\frac{x}{t} = \frac{6.5}{5}$$

$$\frac{\text{feet}}{\text{sec}} = \frac{x}{t} = \frac{6.5}{5} = 1.3 \text{ average speed} =$$

1.3 ft/s

$$\begin{array}{r} 1.3 \\ \times 5 \\ \hline 6.5 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$
10 secs
 $t =$

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

speed \approx
1.8 ft/s

No calculators

Shangqi Lyn
PRINT NAME

PERM NUMBER

3572468

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.

1.45

t (seconds)	0	1	2	3	4	5
x (feet)	0.0	1.3	2.9	4.1	5.3	6.5

$$\begin{array}{r} 1.3 \\ 3 \overline{) 4.1} \\ \underline{3} \\ 11 \end{array}$$

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

$$6.5 \div 5 = 1.3$$

average speed =

1.3 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$
/ secs

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

speed \approx
1.4 ft/s

No calculators

PRINT NAME Luis Quintero

PERM NUMBER

9343013

Put your answer in the box provided.

box

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0.0}{5 - 0} = \frac{6.5}{5} = 1.3$$

average speed = 1.3 ft/s

- (b) When was the speed greatest?

$$\frac{1.3 - 0.0}{1 - 0} = \frac{1.3}{1} = 1.3$$

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2$$

During the interval starting at $t =$

1 secs

$$\frac{2.9 - 1.3}{2 - 1} = \frac{1.6}{1} = 1.6$$

$$\frac{5.3 - 4.1}{4 - 3} = \frac{1.2}{1} = 1.2$$

$$\frac{6.5 - 5.3}{5 - 4} = \frac{1.2}{1} = 1.2$$

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

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2 \text{ ft/sec}$$

speed \approx 6 ft/s

$$2 \sqrt{1.2}$$

No calculators

Angelina Ynan
PRINT NAME

PERM NUMBER

P310004

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	1.3	2.9	4.1	5.3	6.5

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

$$S = \frac{d}{t} = \frac{6.5}{5} = 1.3 \text{ ft/s.}$$

average speed = 1.3 ft/s

- (b) When was the speed greatest?

$$\begin{aligned} 0-1 &= 1.3. \\ 1-2 &= 1.6. \\ 2-3 &= 1.2. \\ 3-4 &= 1.2 \\ 4-5 &= 1.2 \end{aligned}$$

During the interval starting at $t =$ 1 secs

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

$$\begin{aligned} 0-1 &= 1.3 \text{ ft/s.} \\ 1-2 &= 1.6 \text{ ft/s.} \\ 2-3 &= 1.2 \text{ ft/s.} \\ 3-4 &= 1.2 \text{ ft/s.} \\ 4-5 &= 1.2 \text{ ft/s.} \end{aligned}$$

speed \approx 1.2 ft/s

\therefore constant speed $\rightarrow 1.2 \text{ ft/s.}$

No calculators

Gaby Carrasco
PRINT NAME

PERM NUMBER

9401894

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{1.3 - 0}{1 - 0} = \frac{1.3}{1} = 1.3$$

$$\frac{2.9 - 1.3}{2 - 1} = \frac{1.6}{1} = 1.6$$

average speed = 1.3 ft/s

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2$$

$$\frac{5.3 - 4.1}{4 - 3} = \frac{1.2}{1} = 1.2$$

$$6.5 - 5.3 = 1.2$$

$$\begin{array}{r} 1 \\ 3.6 \\ 1.3 \\ 1.6 \\ \hline 6.5 \end{array}$$

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5.4} \\ 1.1 \\ \underline{1.1} \\ 0 \end{array}$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 1 secs

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

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2$$

speed \approx 1.2 ft/s

$$\begin{array}{r} 2.9 \\ + 0.6 \\ \hline 3.5 \end{array}$$

$$\begin{array}{r} 3.5 \\ 2.5 \\ \hline 1.0 \end{array}$$

$$\begin{array}{r} 1.4 \\ 2.5 \overline{) 3.50} \\ \underline{2.5} \\ 1.00 \end{array}$$

No calculators

Louann Herve
PRINT NAME

PERM NUMBER

8291064

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	1.3	2.9	4.1	5.3	6.5

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

$$\frac{6.5 - 0.0}{5 - 0} = \frac{6.5}{5}$$

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

- (b) When was the speed greatest?

④ $\frac{6.5 - 5.3}{5 - 4} = \frac{1.2}{1}$

During the interval starting at $t =$ 1 secs

③ $\frac{5.3 - 4.1}{4 - 3} = \frac{1.2}{1}$

① $\frac{2.9 - 1.3}{2 - 1} = \frac{1.6}{1}$

② $\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1}$

⑤ $\frac{1.3 - 0}{1 - 0} = \frac{1.3}{1}$

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

$$\frac{4.1 - 2.9}{3 - 2} = 1.2$$

speed \approx 1.2 ft/s

No calculators

Aaliyah Zendejas
PRINT NAME

PERM NUMBER

7765753

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	1.3	2.9	4.1	5.3	6.5

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

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

$$\frac{6.5 - 0.0}{5 - 0}$$

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

$$\frac{1.3}{1}$$

$$\frac{2.9}{2}$$

$$\frac{4.1}{4}$$

$$\frac{5.3}{5}$$

average speed =

$$\frac{3.4}{3.30}$$

ft/s

- (b) When was the speed greatest?

$$\begin{array}{r} 3.36 \\ 6 \overline{) 20.80} \\ \underline{18} \\ 28 \\ \underline{18} \\ 40 \end{array}$$

During the interval starting at $t =$

3

secs

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

$$\frac{4.1 - 2.9}{3 - 2.5}$$

$$\frac{4.1 - 2.9}{3 - 2}$$

$$\frac{1.2}{1}$$

speed \approx

$$\frac{4.1 - 2.9}{.5}$$

ft/s

$$\begin{array}{r} 3.4 \\ -2.9 \\ \hline 1.2 \end{array}$$

$$\frac{4.1 \times}{.5} = 1.2$$

No calculators

PRINT NAME

Daniel Ortiz

PERM NUMBER

8359069

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	1.3	2.9	4.1	5.3	6.5

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

$$\begin{array}{r} 1.3 \\ 5 \overline{) 6.5} \\ \underline{5} \\ 15 \end{array}$$

$$\frac{6.5 - 0}{5 - 0} = \frac{6.5}{5}$$

average speed = 1.3 ft/s

- (b) When was the speed greatest?

During the interval starting at $t =$

secs

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

$$\begin{array}{r} 1.4 \\ 2.5 \overline{) 3.5} \\ \underline{1.0} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

1.4 = average

speed
during 2 seconds
since start

$$\frac{4.1 - 2.9}{3 - 2} = \frac{1.2}{1} = 1.2$$

speed \approx 1.2 ft/s

No calculators

Jasmine Garcia
PRINT NAME

PERM NUMBER

8125239

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	1.3	2.9	4.1	5.3	6.5

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

average speed = 1.3 ft/s

$$\frac{6.5}{5} = \frac{1.3}{1} = 1.3$$

- (b) When was the speed greatest?

During the interval starting at $t =$ 1 secs

$$t = 1 \rightarrow t = 2$$

$$\text{avg speed} = 1.6 \text{ ft/s}$$

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

$$t=1 \quad t=2 \quad t=3 \quad = \frac{1.2}{2} = \frac{0.5 + 0.6}{2} \quad \text{speed} \approx \text{0.7 ft/s}$$

$$0.5 \overline{) 3.5} = 7$$

$$\frac{3.5}{0.5} = 7$$