

Rates of Changes answers

Workout

Question 1

- (a) 2m/s (b) 28mph (c) 0m/s

Question 2

- (a) 2cm/s (b) 1.2cm/s (c) -2.5cm/s

Question 3

- (a) 5m/s² (b) 12.5m/s²

Question 4

- (a) 0 (b) 4 (c) -1

*your answers to (b) and (c) may be slightly different based on your tangent line.

Question 5

- (a) 7.5m/s (b) 4.5 seconds (c) 1.333... m/s

*your answers to (a), (b) and (c) may be slightly different based on your tangent line.

Question 6

- (a) 0.5m/s² (b) 0.1714m/s² (c) -0.127m/s²

Question 7

- (a) 3.4 m/s (b) 0.4333... m/s

Question 8

- (a) 27 cm/s (b) -10.6875 cm/s

*your answer to (b) may be slightly different based on your chord.

Question 9

- (a) 0.525 m/s^2 (b) -0.325 m/s^2

*your answers to (a) and (b) may be slightly different based on your chords.

Apply

Question 1

- (a) 14.4 m/s
(b) The handdrawn tangent may be slightly different to the actual tangent.
(c) 58.57 m/s