

10.2 Answers

GCSE Mathematics Kinematics

Answer 1

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

Answer 2

- (i) 1000
- (ii) 86 400 seconds

Answer 3

- (i) 720 seconds
- (ii) 432 metres
- (iii) less

Answer 4

- (i) 2700 seconds
- (ii) 18900 metres
- (iii) 18.9 km

Answer 5

- (i) 16 m/s
- (ii) 512 m

Answer 6

2.3 kg

Answer 7

- (i) acceleration
- (ii) distance

Answer 8

- (i) 6 m/s
- (ii) 45 s
- (iii) 135 m
- (iv) before
- (v) (–) 0.133... m/s²

Answer 9

$$3980 \div 5.4 = 737 \text{ km/h}$$

Answer 10

- (i) 4
- (ii) 12
- (iii) 3

Answer 11

2

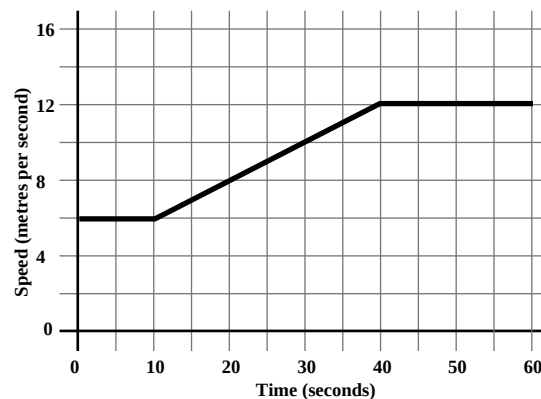
Answer 12

$$433.5 \div 3.4 = 127.5 \text{ km/h}$$

Answer 13

- (i) $t = 10 \text{ s}$ and $t = 40 \text{ s}$
- (ii) (–) $10 \div 30 = \text{(–)} 0.333 \text{ m/s}^2$
- (iii) 490 m

Answer 14



Answer 15 : 180 km/h