

Multiple Choice Answers

Q36: C

Q38: A

Q40: A

10(a)(i)	position A and / or E
	position G
10(a)(ii)	1 month
10(b)(i)	110 000 (km / h)
	$(v =) 2\pi r / T$
	$T = 365 \times 24\text{h}$ OR $2\pi \times 1.5 \times 10^8 / 365 \times 24$
10(b)(ii)	500 s
	$v = s / t$ OR $(t =) s / v$ OR $1.5 \times 10^{11} / 3.0 \times 10^8$

10(a)	24 km / s
	$v = 2\pi r / T$ OR $(v =) 2\pi r / T$ OR $(2\pi \times 2.28 \times 10^8) / (690 \times 24 \times 60 \times 60)$
	$(2\pi \times 2.28 \times 10^8) / (690 \times 24 \times 60 \times 60)$ OR $(T =) 690 \times 24 \times 60 \times 60$ OR $(T =) 59\,616\,000$ (s)
10(b)	elliptical / ellipse
10(c)(i)	wavelength (of light from distant galaxies) increases
	occurs when galaxies are moving away (from Earth)
10(c)(ii)	speed / velocity (that galaxy is moving away from Earth)