

Bearings – Paper 2 – Mark Scheme

Question 1

21	(a) 18.7	3	M2 for $\sin R = 50 \times \frac{\sin 140}{100}$ (= 0.3219...) or M1 for $\frac{\sin R}{50} = \frac{\sin 140}{100}$ oe
	(b) 261(.3)	2ft	M1 360 – 80 – their (a)

Question 2

13	(a) 52	2	M1 OAB or $OBA = 38$ or $OCT = 90$
	(b) 322	2	M1 $BCT = 38$ or $BCO = 52$

Question 3

21	(a) 84(.00..)	4	M2 for $\cos(\dots) = \frac{2.7^2 + 4.5^2 - 5^2}{2 \times 2.7 \times 4.5}$ or (M1 for $5^2 = 2.7^2 + 4.5^2 - 2 \times 2.7 \times 4.5 \times \cos C$) A1 for 0.1045... (implied by correct answer)
	(b) 136	1ft	220 – their (a)

Question 4

12	(a) 10(.0)	2	M1 $\frac{1}{2} \times 8 \times 5 \times \sin 150$
	(b) 210	2	M1 30° correctly placed at B or C oe

Question 5

16	142 or 142.0...	5	B1 for $CBD = 30$ M2 for $[\sin D =] \frac{6 \times \sin \text{their} B}{8}$ oe or M1 for $\frac{6}{\sin D} = \frac{8}{\sin(\text{their} 30)}$ oe A1 for $[D =] 22$ or 22.0 or $22.02\dots$ B1FT for $90 + (\text{their} 30 + \text{their} 22)$ evaluated correctly for their final answer or for $360 - 90 - \text{their} BCD$ evaluated correctly for their final answer
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Question 6

7	320	2	M1 for $180 + 140$ oe
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