

1	Alternative method 1		
	$110 \div 2$ or 55 or $2 \div 110$ or 0.018(1...) or 0.0182 or $44 \div 110$ or 0.4 or $110 \div 44$ or 2.5	M1	oe
	$44 \div (110 \div 2)$ or 0.8 or $\frac{4}{5}$	M1dep	oe eg 2880 or calculation that would evaluate to 0.8 eg $2 \div 110 \times 44$ or $44 \div 110 \times 2$ or $2 \div (110 \div 44)$ or $\frac{110 + 44}{110 \div 2} - 2$ or $2.8 - 2$
	48	A1	
	Alternative method 2		
	$110 \div 2 \div 60$ or 0.916... or 0.917 or 0.92 or $2 \times 60 \div 110$ or 1.09(0...) or 1.091	M1	oe
	$44 \div (110 \div 2 \div 60)$	M1dep	oe calculation that would evaluate to 48 eg $44 \times 2 \times 60 \div 110$
	48	A1	

1 cont	Additional Guidance	
	Ignore units for M marks eg 55 miles	M1
	Do not award A1 if premature approximation for 48 seen eg (Alt 1) $0.018 \times 44 = 0.8$ Answer 48 (Alt 1) $0.018 \times 44 = 0.792$ and $0.792 \times 60 = 47.52$ Answer 48 (Alt 2) $44 \div 0.917 = 48$ (Alt 2) $44 \div 0.917 = 47.9$ Answer 48 (Alt 2) $44 \times 1.09 = 48$ (Alt 2) $44 \times 1.09 = 47.96$ Answer 48	M2A1 M2A0 M2A1 M2A0 M2A1 M2A0
	48 followed by answer 2 h 48 min	M2A0
	48 followed by answer 168 min	M2A0
	Allow M1 even if not subsequently used	
	Alt 1 Working in seconds leading to 2880	M2

2	176 ÷ 48 or 3.66... or 3.67 or $\frac{11}{3}$ or 3 h 40 mins	M1	oe eg 220 mins implied by 12 40 pm
	(293 – 176) ÷ 65 or 117 ÷ 65 or 1.8 or $\frac{9}{5}$ or 1 h 48 mins	M1	oe eg 108 mins
	their 3.66... + their 1.8 or $\frac{82}{15}$ or [5.46, 5.47] or 5 h 28 mins or [2 27 (pm), 2 28.2 (pm)]	M1dep	oe eg 328 mins dep on M2 implied by adding times eg 9 + 3 40 + 1 48
	5.5 and [5.46, 5.47] and Yes or 5 h 30 mins and 5 h 28 mins and Yes or 330 mins and 328 mins and Yes or [2 27 (pm), 2 28.2 (pm)] and Yes	A1	oe arrival time must be in a comparable time format
	Additional Guidance		
	Up to M3 may be awarded for correct work seen in multiple attempts even if not subsequently used		
	Accept use of 24 hour clock throughout		
	Do not accept 2 28 am as a correct arrival time		
	$\frac{176}{48} = 3.6$, $\frac{117}{65} = 1.8$, $3.6 + 1.8 = 5.4$, 2 24 pm and Yes		M1M1M1A0
	$\frac{176}{48} = 3.7$, $\frac{117}{65} = 1.8$, $3.7 + 1.8 = 5.5$, 2 30 pm and Arrives on time		M1M1M1A0
	3.6 + 1.8 = 5.4, 2 24 pm and Yes		M0M1M0A0
	3.7 + 1.8 = 5.5, 2 30 pm and Arrives on time		M0M1M0A0