

1		
	(a)	38
		118
		62
	(b)	69
	(c)	107
	(a)	0 2.25 2 1.25
	(b)	Fully correct smooth curve
2	(a)	(i) (a) $\mathbf{p + q}$
		(b) $\frac{1}{2} \mathbf{p} - \frac{1}{2} \mathbf{q}$ oe
		(c) $\frac{3}{4} \mathbf{p} + \frac{3}{4} \mathbf{q}$ oe cao
		(ii) $\overrightarrow{AN}$ is a multiple of $\overrightarrow{AC}$ o.e
(b)	(i)	30
	(ii)	135

3	(a) (i)	Similar
	(ii)	4.5
	(iii)	13.5 cao
	(iv)	$180 - x - y$ oe $180 - x$ oe
	(b) (i)	96
	(ii)	48 ft
	(iii)	97 ft
	(iv)	35
	(c)	$20n = 360$ oe or $\frac{180(n-2)}{n} = 160$ oe or $180(n-2) = 8 \times 360$ oe or $8\left(\frac{360}{n}\right) = 180 - \frac{360}{n}$ 18 www 3