These are some alternative methods that can be used for Question 7b and 7c

Qu	Working		Answer	Mark	Notes
ALT 1 Ratio					
(b)	$\left[\dfrac{AE}{AC}=\dfrac{3}{5}\right]$ $\dfrac{6-x}{15}=\dfrac{3}{5}$ or $\dfrac{4-y}{5}=\dfrac{3}{5}$	[3:5]　　　　[3:5] $[-x+6:15]$　$[4-y:5]$ $-x+6=9$ or $4-y=3$			M1 for writing an equation in terms of x or y
	$x=-3$ or $y=1$	$x=-3$ or $y=1$			M1dep for solving either equation to find either the x coordinate or the y coordinate
			$(-3, 1)$		A1 cao
ALT 1 Eqn of line and distance					
(c)	Distance DE $(x-6)^2+(y-4)^2=2.5$ oe Distance AD $(x+3)^2+(y-1)^2=92.5$ oe	Line ED $y=-3x+22$			M1 for equation of line ED or distance of AD or DE
	eg $(x-6)^2+(-3x+22-4)^2=2.5$ $(x+3)^2+(-3x+22-1)^2=92.5$				M1dep for a correct equation for the x or y coordinate of D
			$(6.5, 2.5)$		A1 cao
ALT 2 Pythagoras and Trig					
(c)	$\tan^{-1}BAG=\dfrac{4.5}{8.5}[\Rightarrow BAG=27.8(9...)]$				M1 for angle BAG (where AGB is a right angle)
	$[AB=]\sqrt{8.5^2+4.5^2}\left[=\dfrac{\sqrt{370}}{2}\right]$ **and** $\tan^{-1}\left(\dfrac{4.5}{8.5}\right)-2\times\left(\tan^{-1}\left(\dfrac{4.5}{8.5}\right)-\tan^{-1}\left(\dfrac{3}{9}\right)\right)[\Rightarrow DAH=8.97(2...)]$				M1dep for distance AB **and** for angle DAH (where angle AHD is a right angle)
			$(6.5, 2.5)$		A1 cao