21	$(2r)^2 - \pi r^2$ oe or $x^2 - \pi \times (0.5x)^2$		5	M1	A correct expression for the area of the shaded parts in one variable only **for this mark only**, accept without brackets (eg $2r^2 - \pi r^2$ or $x^2 - \pi \times \frac{1}{2}x^2$) (any letter can be used eg *AB*, *x*, *y* etc, here, *r* = radius, *x* = side of square)
	$4r^2 - \pi r^2 = 80$ oe eg $r^2 - 0.25\pi r^2 = 20$ or $x^2 - 0.25\pi x^2 = 80$ or $4x^2 - \pi x^2 = 320$ oe			M1	A correct equation in one variable with brackets expanded (may be seen later in working)
	$r^2 = \frac{80}{4-\pi}$ $(= 93.19\ldots)$ or $r = \sqrt{\frac{80}{4-\pi}}$ $(= 9.65\ldots)$ $x^2 = \frac{80}{1-0.25\pi} (= 372.78..)$ or $x = \sqrt{\frac{80}{1-0.25\pi}} (19.307...)$ oe eg $\sqrt{\frac{320}{4-\pi}}$			M1	A correct expression for the radius squared or radius or for the side of the square squared or for the side of the square
	$(AC =) \sqrt{(2\times"9.65")^2 + (2\times"9.65")^2}$ oe or $(AC =)\ 2\times\sqrt{"9.65"^2 + 9.65"^2}$ $(AC =) \sqrt{"19.307"^2 + "19.307..."^2}$ oe eg $\sqrt{8\times\frac{80}{4-\pi}}$ oe or $(AC =) \frac{2\times"9.65"}{\sin 45}$ or $\frac{2\times"9.65"}{\cos 45}$			M1	For a correct calculation to find the length of *AC*
	Correct answer scores full marks (unless from obvious incorrect working)	27.3		A1	27.3 – 27.5
					Total 5 marks