20	eg $0.5 \times x \times x \times \sin 60$ $\left(=\frac{\sqrt{3}}{4}x^2 = 0.433...x^2\right)$ oe where $x = PQ$ eg $0.5 \times 2n \times 2n \times \sin 60 \left(=\sqrt{3}n^2 = 1.732...n^2\right)$ oe where $2n = PQ$ or use $0.5 \times b \times h$ where $h = \sqrt{x^2-(0.5x)^2}\,(=\frac{\sqrt{3}}{2}x)$ oe		4	M1	For expression for area of triangle [using $AB = x$ and $PQ = \frac{2}{3}x$ gives $\frac{\sqrt{3}}{9}x^2 = 0.192...x^2$] (correct expression in 1 variable eg PQ)
	eg $6 \times 0.5 \times 1.5x \times 1.5x \times \sin 60$ $\left(=\frac{27\sqrt{3}}{8}x^2 = 5.845...x^2\right)$ oe eg $6 \times 0.5 \times 3n \times 3n \times \sin 60$ $\left(=\frac{27\sqrt{3}}{2}n^2 = 23.382...n^2\right)$ oe or eg $2(\frac{1}{2}\times 1.5x \times 1.5x \times \sin 120) + 1.5x \times AE$ where $AE = \sqrt{(1.5x)^2+(1.5x)^2-2\times 1.5x\times 1.5x\times\cos 120}$ $\left(=\frac{27\sqrt{3}}{8}x^2 = 5.845...x^2\right)$ or use of $6 \times 0.5 \times b \times h$, finding h by Pythagoras			M1	for expression for area of hexagon [using $AB = x$ and $PQ = \frac{2}{3}x$ gives $\frac{3\sqrt{3}}{2}x^2 = 2.598...x^2$] (correct expression in 1 variable eg AB)
	eg $6 \times 0.5 \times 1.5x \times 1.5x \times \sin 60 - 0.5 \times x \times x \times \sin 60 = 72\sqrt{3}$ oe **or** $\left(\frac{27\sqrt{3}}{8}-\frac{\sqrt{3}}{4}\right)x^2 = 72\sqrt{3}$ **or** $(5.845\ldots - 0.433\ldots)x^2 = 124.7\ldots$ **or** eg $6 \times 0.5 \times 3n \times 3n \times \sin 60 - 0.5 \times 2n \times 2n \times \sin 60 = 72\sqrt{3}$ oe $\left(\frac{27\sqrt{3}}{2}-\sqrt{3}\right)n^2 = 72\sqrt{3}$ or $(23.382\ldots - 1.732\ldots)n^2 = 124.7\ldots$			M1	for a correct equation for shaded area (correct equation in 1 variable, eg PQ or x etc)
		4.8		A1	