18	eg $(BV^2 =)3^2+6^2(=45)$ **or** $(CT^2 =)3^2+6^2(=45)$ **or** $(DH^2 =)\ 6^2 + 6^2\ (= 72)$ **or** $(MV^2 =)3^2+3^2(=18)$		4	M1	a correct expression for eg BV^2 **or** CT^2 **or** DH^2 **or** MV^2 where M is the midpoint of DC **or** a correct expression for [length]^2 for any length in the cube using Pythagoras	M3 for $(VT =)\sqrt{6^2+3^2+3^2}$ $(=3\sqrt{6}$ or 7.34...) (M2 for $(VT^2 =)$ $6^2+3^2+3^2\ (=54)$)
	eg $(BV =)\sqrt{3^2+6^2}\ \left(=\sqrt{45}\right.$ or $3\sqrt{5}$ or 6.70...$\left.\right)$ **or** $(CT =)\sqrt{3^2+6^2}\ \left(=\sqrt{45}\right.$ or $3\sqrt{5}$ or 6.70...$\left.\right)$ **or** $(DH =)\sqrt{6^2+6^2}\ \left(=\sqrt{72}\right.$ or $6\sqrt{2}$ or 8.48...$\left.\right)$ **or** $(MV =)\sqrt{3^2+3^2}\ \left(=\sqrt{18}\right.$ or $3\sqrt{2}$ or 4.24...$\left.\right)$			M1	for a complete method for eg BV **or** CT **or** DH **or** MV **or** any length in the cube using Pythagoras	
	$(VT =)\ \sqrt{"45"+3^2}$ **or** $\sqrt{\left(\frac{"\sqrt{72}"}{2}\right)^2+6^2}$ **or** $\sqrt{"18"+6^2}$ **or** $3\sqrt{6}$ **or** 7.34...			M1	for a correct expression for VT (condone missing brackets around $3\sqrt{5}$ or $3\sqrt{2}$ or $\frac{\sqrt{72}}{2}$)	
		$\sqrt{54}$		A1	if $\sqrt{54}$ seen and answer then given as $3\sqrt{6}$ isw and award full marks	
						Total 4 marks