8(a)(i)	half-wave (rectification)
8(a)(ii)	$V_0 = 6.0 \times \sqrt{2}$ $= 8.5\ \text{V}$
8(b)(i)	$P = V^2 / R$
	$P_0 = 8.5^2 / 45$ $= 1.6\ \text{W}$
8(b)(ii)	two humps of width $0.5T$ and two sections of zero power of width $0.5T$
	all humps drawn have width $0.5T$, minima at $P = 0$ and peaks at $P = P_0$
	correct sinusoidal shape, with smooth troughs sitting on t-axis at $P = 0$
8(b)(iii)	mean power within each hump is $\frac{1}{2}P_0$ from the symmetry of the curve
	additional half factor from removal of half of the power in each cycle
8(b)(iv)	$\langle P \rangle = V_{\text{r.m.s.}}{}^2 / R$ $V_{\text{r.m.s.}} = \sqrt{\left[(1.6 / 4) \times 45\right]}$ $= 4.2\ \text{V}$