Surds, Indices

YEAR	PAPER	QUESTION	
2014	1	Express $\sqrt{40} + 4\sqrt{10} + \sqrt{90}$ as a surd in its simplest form.	3
2014	2	Simplify $\dfrac{n^5 \times 10n}{2n^2}$.	3
2015	1	Express $\dfrac{4}{\sqrt{8}}$ with a rational denominator. Give your answer in its simplest form.	3
2015	1	Evaluate $8^{\frac{5}{3}}$.	2
2016	1	The function $f(x)$ is defined by $f(x) = \dfrac{2}{\sqrt{x}}, \quad x > 0.$ Express $f(5)$ as a fraction with a rational denominator.	2
2016	2	Simplify $\left(n^2\right)^3 \times n^{-10}$. Give your answer with a **positive** power.	3
2017	2	Express $\dfrac{1}{\sqrt[3]{x}}$ in the form x^n.	2
2018	1	Express $\dfrac{9}{\sqrt{6}}$ with a rational denominator. Give your answer in its simplest form.	2

2018	1	Remove the brackets and simplify $\left(\dfrac{2}{3}p^4\right)^2$.	2
2019	1	Express $\dfrac{\sqrt{2}}{\sqrt{40}}$ as a fraction with a rational denominator. Give your answer in its simplest form.	3
2019	2	Simplify $\dfrac{a^4 \times 3a}{\sqrt{a}}$.	3
2022	1	Simplify $\left(m^{-2}\right)^4 \times m^{-5}$. Give your answer with a **positive** power.	3
2022	1	Expand and simplify $\sqrt{10}\left(\sqrt{10}-\sqrt{2}\right)+8\sqrt{5}$.	3