

Written assignments
to hand in.

Sec P4 68, 80

Due Friday 9/8

Sec P5 70, 78

Due Monday 9/11

Sec P6 49, 54, 72

Due Tuesday 9/12

Sec P4

$$(71) \quad \sqrt[9]{x^5} \stackrel{\substack{\uparrow \\ \text{by} \\ \text{definition}}}{=}}{(x^5)^{\frac{1}{9}}} = \boxed{x^{\frac{5}{9}}}$$

$$(73) \quad \sqrt[6]{y^5} \sqrt[3]{y^2} = y^{\frac{5}{6}} y^{\frac{2}{3}} = y^{\frac{5}{6} + \frac{2}{3}} = y^{\frac{9}{6}} = \boxed{y^{\frac{3}{2}}}$$

Discussion Problems

From the department syllabus
These are not to hand in.

Section P4, P5

WebAssign

① Sections P3+P4

Due Thursday 9/7

by 9pm.

② Sections P5+P6

Due Tuesday 9/12

by 9pm.

$$\textcircled{81} \quad \frac{\sqrt{xy}}{\sqrt[4]{16xy}} = \frac{(xy)^{\frac{1}{2}}}{(16xy)^{\frac{1}{4}}} = \frac{x^{\frac{1}{2}} y^{\frac{1}{2}}}{16^{\frac{1}{4}} x^{\frac{1}{4}} y^{\frac{1}{4}}} = \frac{x^{\frac{1}{2}-\frac{1}{4}} y^{\frac{1}{2}-\frac{1}{4}}}{2} = \boxed{\frac{x^{\frac{1}{2}} y^{\frac{1}{2}}}{2}}$$

$$= \frac{\sqrt{x} \sqrt{y}}{2}$$
$$= \boxed{\frac{\sqrt{xy}}{2}}$$