

- [3] 1. Label all the indicated parts of a radical expression:

The diagram shows the expression $\sqrt[4]{9x}$. Three arrows point to different parts: one points to the index '4', one points to the radicand '9x', and one points to the radical symbol '√'.

- [8] 2. Express mixed radicals as entire radicals:

$6x^3\sqrt{4x}$	$4x^5\sqrt[3]{2x^2}$
$5ay^2\sqrt[3]{y}$	$-4a^5b^3\sqrt{2ab}$

- [8] 3. Express entire radicals as mixed radicals if possible. If not possible, state why.

$\sqrt[3]{54x^4}$	$\sqrt{2a^3b^6}$
$\sqrt{144xb^3}$	$\sqrt[4]{80a^7b^4}$

[12] 4. Simplify, add and subtract when possible. Show your work.

$$2\sqrt{48x^3} + 5x\sqrt{27x}$$

$$-\sqrt{5x} + 6\sqrt{5x^3} + \sqrt[2]{125x}$$

$$-a\sqrt[3]{ab} - 7a\sqrt[3]{ab}$$

$$\sqrt{147c} + \sqrt{108c} - \sqrt{3c^5}$$