

In part (b), take any  $a \neq 0$  and think of  $x$  as being close to  $a$  (this is OK because you have to take the limit  $x \rightarrow a$ ). You may, for example, write

$$x^{2/3} - a^{2/3} = (\sqrt[3]{x})^2 - (\sqrt[3]{a})^2 = (\sqrt[3]{x} - \sqrt[3]{a})(\sqrt[3]{x} + \sqrt[3]{a}) ,$$

and, similarly,

$$x - a = (\sqrt[3]{x})^3 - (\sqrt[3]{a})^3 = \dots ,$$

after which you can use the same formula as the one given in the Hint to Exercise 2.2/28.