

### Worksheet 7.1

Rewrite each of the following using exponent notation

①  $\sqrt[3]{11}$

②  $\sqrt[4]{5}$

③  $\sqrt[5]{23}$

④  $\sqrt{7}$

⑤  $\sqrt[3]{17}$

⑥  $\sqrt[4]{2}$

⑦  $\sqrt[4]{8}$

⑧  $\sqrt[3]{15}$

⑨  $\sqrt{10}$

⑩  $\sqrt[3]{3}$

⑪  $\sqrt[5]{6}$

⑫  $\sqrt[3]{21}$

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Rewrite each of the following using radicals

⑬  $2^{1/3}$

⑭  $5^{1/4}$

⑮  $11^{1/2}$

⑯  $6^{1/5}$

⑰  $23^{1/7}$

⑱  $31^{1/4}$

⑲  $103^{1/2}$

⑳  $17^{1/3}$

㉑  $4^{1/3}$

㉒  $7^{1/8}$

㉓  $8^{1/5}$

㉔  $12^{1/4}$

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Use a calculator to evaluate each of the following.

㉕  $\sqrt[3]{5}$

㉖  $\sqrt[3]{24}$

㉗  $\sqrt[4]{10}$

㉘  $\sqrt[4]{3}$

㉙  $\sqrt[5]{16}$

㉚  $6^{1/5}$

㉛  $12^{1/3}$

㉜  $7^{1/4}$

㉝  $17^{-2/3}$

㉞  $(\sqrt[3]{26})^2$

㉟  $124^{3/4}$

㊱  $\sqrt[4]{37^3}$

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Solve for x:

㊲  $x^5 = 137$

㊳  $3x^4 + 2 = 5$

㊴  $(x+3)^5 = 32$

㊵  $(2x-7)^6 = 120$

㊶  $-2x^3 = 50$

㊷  $-(x-1)^7 = 125$

㊸  $(2x+1)^4 - 10 = 20$

㊹  $3 - x^2 = 1$

㊺  $12 - (3x+2)^3 = 20$