1) $\sqrt[4]{x^8}$

$\sqrt[4]{(x\cdot x\cdot x\cdot x)(x\cdot x\cdot x\cdot x)}$

x^2

2) $\sqrt{a^6}$

$\sqrt{(a\cdot a)(a\cdot a)(a\cdot a)}$

a^3

3) $\sqrt[3]{x^7}$

$\sqrt[3]{(x\cdot x\cdot x)(x\cdot x\cdot x)\,x}$

$x^2\sqrt[3]{x}$

4) $\sqrt[4]{a^{10}}$

$\sqrt[4]{(a\cdot a\cdot a\cdot a)(a\cdot a\cdot a\cdot a)\,a\cdot a}$

$a^2\sqrt[4]{a^2}$

5.) $\frac{x^5}{x} \cdot \sqrt[3]{x^0}$

$x^4 \cdot x^2$

x^6

6.) $\frac{x^{10}}{x^{12}} \cdot \sqrt[4]{x^8}$

$x^{-2} \cdot x^2$

x^0

1

* Anything to a 0 power is one.

List of Skills on Test

If $f(x)=x^2$ what is $f(a+b)$. Show steps!

Go between exponential and log

Rules of exponents

Know inverse by looking at graph

Match equivalent exponents

If two functions are inverse, what is there composite

$f(x)=x \quad g(x)=3x \quad h(x)=x^2$

find $f(a+b)-g(a+b)+h(a+b)$

$(a+b)-3(a+b)+(a+b)^2 \qquad (a+b)(a+b)$

$(a+b)-3a+3b+a^2+b^2$

$a+b-3a-3b+a^2+2ab+b^2$

$-2a-2b+a^2+2ab+b^2$