

5-4 nth Roots

Simplify.

1. $\pm\sqrt{100y^8}$

ANSWER:

$$\pm 10y^4$$

2. $-\sqrt{49u^8v^{12}}$

ANSWER:

$$-7u^4v^6$$

3. $\sqrt{(y-6)^8}$

ANSWER:

$$(y-6)^4$$

4. $\sqrt[4]{16g^{16}h^{24}}$

ANSWER:

$$2g^4h^6$$

Simplify.

12. $\pm\sqrt{121x^4y^{16}}$

ANSWER:

$$\pm 11x^2y^8$$

14. $\pm\sqrt{49x^4}$

ANSWER:

$$\pm 7x^2$$

16. $-\sqrt{81a^{16}b^{20}c^{12}}$

ANSWER:

$$-9a^8b^{10}c^6$$

18. $\sqrt{(x+15)^4}$

ANSWER:

$$(x+15)^2$$

20. $\sqrt{(a^2+4a)^{12}}$

ANSWER:

$$(a^2+4a)^6$$

22. $\sqrt[6]{d^{24}x^{36}}$

ANSWER:

$$d^4x^6$$