



Math worksheet on 'Radicals - Square - Simplify From Squared Factors, Values and Variables, Radical Remaining (Level 1)'. Part of a broader unit on 'Radicals - Simplifying Practice'

Learn online: [app.mobius.academy/math/units/radicals\\_simplifying\\_practice/](http://app.mobius.academy/math/units/radicals_simplifying_practice/)

1

Simplify the radical

$$\sqrt{2^2 \cdot 7 \cdot r^2 \cdot r}$$

a

$$r^3\sqrt{8r}$$

b

$$r\sqrt{10r^2}$$

c

$$4r^3\sqrt{10r^2}$$

d

$$5r\sqrt{8r}$$

e

$$3r\sqrt{3r}$$

f

$$2r\sqrt{7r}$$

2

Simplify the radical

$$\sqrt{2^2 \cdot 3 \cdot d^2 \cdot d}$$

a

$$2d\sqrt{3d}$$

b

$$5d\sqrt{d^2}$$

c

$$5d^3\sqrt{4d}$$

d

$$3d\sqrt{6d}$$

e

$$2d^3\sqrt{d}$$

f

$$d^2\sqrt{6d^3}$$

3

Simplify the radical

$$\sqrt{3 \cdot 5^2 \cdot n^2 \cdot n}$$

a

$$5n\sqrt{2n^2}$$

b

$$6n^3\sqrt{n^3}$$

c

$$5n\sqrt{3n}$$

d

$$3n^2\sqrt{6n}$$

e

$$4n^3\sqrt{3n}$$

f

$$7n\sqrt{n^2}$$

4

Simplify the radical

$$\sqrt{2^2 \cdot 7 \cdot y}$$

a

$$2\sqrt{10y^3}$$

b

$$5\sqrt{5y^3}$$

c

$$4\sqrt{6y^2}$$

d

$$\sqrt{10y}$$

e

$$2\sqrt{7y^3}$$

f

$$2\sqrt{7y}$$

5

Simplify the radical

$$\sqrt{2 \cdot 3^2 \cdot d^2}$$

a

$$5d^3\sqrt{3}$$

b

$$d$$

c

$$4d^3$$

d

$$2d^2\sqrt{4}$$

e

$$3d\sqrt{2}$$

f

$$5d\sqrt{2}$$

6

Simplify the radical

$$\sqrt{5^2 \cdot 7 \cdot p^2 \cdot p}$$

a

$$3p^3\sqrt{7p}$$

b

$$4p^3\sqrt{9p}$$

c

$$3p\sqrt{8p}$$

d

$$3p\sqrt{5p}$$

e

$$5p\sqrt{7p}$$

f

$$6p\sqrt{9p^3}$$

7

Simplify the radical

$$\sqrt{2^2 \cdot 5 \cdot z^2 \cdot z}$$

a

$$4z\sqrt{7z^2}$$

b

$$4z^2\sqrt{4z^3}$$

c

$$4z^3\sqrt{6z^2}$$

d

$$2z\sqrt{5z}$$

e

$$z^2\sqrt{8z}$$

f

$$z^2\sqrt{3z^2}$$