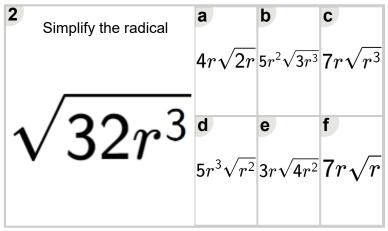# mobius

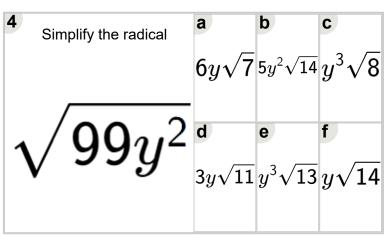Math worksheet on *'Radicals - Cube - Simplifying, Values and Variables, Radical Remaining (Level 1)'*. Part of a broader unit on *'Radicals - Simplifying Practice'*

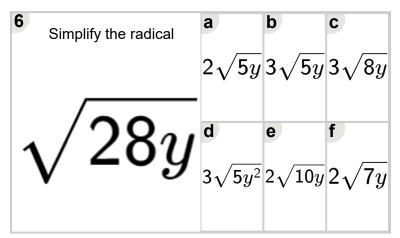Learn online: app.mobius.academy/math/units/radicals_simplifying_practice/

**1** Simplify the radical

$$\sqrt{48x}$$

| a | b | c |
|---|---|---|
| $7\sqrt{6x^3}$ | $6\sqrt{3x^2}$ | $5\sqrt{4x}$ |

| d | e | f |
|---|---|---|
| $4\sqrt{3x}$ | $4\sqrt{6x}$ | $4\sqrt{5x}$ |

**2** Simplify the radical

$$\sqrt{32r^3}$$

| a | b | c |
|---|---|---|
| $4r\sqrt{2r}$ | $5r^2\sqrt{3r^3}$ | $7r\sqrt{r^3}$ |

| d | e | f |
|---|---|---|
| $5r^3\sqrt{r^2}$ | $3r\sqrt{4r^2}$ | $7r\sqrt{r}$ |

**3** Simplify the radical

$$\sqrt{112r}$$

| a | b | c |
|---|---|---|
| $3\sqrt{7r^3}$ | $6\sqrt{9r}$ | $2\sqrt{3r}$ |

| d | e | f |
|---|---|---|
| $7\sqrt{4r^2}$ | $4\sqrt{9r}$ | $4\sqrt{7r}$ |

**4** Simplify the radical

$$\sqrt{99y^2}$$

| a | b | c |
|---|---|---|
| $6y\sqrt{7}$ | $5y^2\sqrt{14}$ | $y^3\sqrt{8}$ |

| d | e | f |
|---|---|---|
| $3y\sqrt{11}$ | $y^3\sqrt{13}$ | $y\sqrt{14}$ |

**5** Simplify the radical

$$\sqrt{275m}$$

| a | b | c |
|---|---|---|
| $5\sqrt{11m}$ | $\sqrt{7m}$ | $4\sqrt{12m^2}$ |

| d | e | f |
|---|---|---|
| $\sqrt{12m^3}$ | $8\sqrt{12m}$ | $5\sqrt{10m}$ |

**6** Simplify the radical

$$\sqrt{28y}$$

| a | b | c |
|---|---|---|
| $2\sqrt{5y}$ | $3\sqrt{5y}$ | $3\sqrt{8y}$ |

| d | e | f |
|---|---|---|
| $3\sqrt{5y^2}$ | $2\sqrt{10y}$ | $2\sqrt{7y}$ |

**7** Simplify the radical

$$\sqrt{75c^3}$$

| a | b | c |
|---|---|---|
| $3c^2\sqrt{c}$ | $4c\sqrt{c}$ | $c\sqrt{c}$ |

| d | e | f |
|---|---|---|
| $3c^2\sqrt{2c^3}$ | $5c\sqrt{3c}$ | $3c\sqrt{6c}$ |