

5.3 Practice

1) Write the expression in radical form.

$$r^{\frac{3}{7}}$$

2) Write the expression in rational exponent

$$\sqrt[3]{5y}$$

Simplify each expression.

3) $64^{-\frac{1}{3}}$

4) $\sqrt[4]{162x^{12}y^9}$

5) $8^{\frac{2}{3}}$

6) $125^{\frac{1}{3}}$

7) $81^{\frac{1}{4}}$

8) $100^{-\frac{1}{2}}$

9) $8\sqrt{5} + 3\sqrt{45}$

10) $r^{\frac{4}{5}} \cdot r^{\frac{2}{3}}$

11) $\frac{\sqrt[4]{64}}{\sqrt[4]{2}}$

12) $(3m)^3 \cdot (27m^6)^{\frac{1}{3}}$