

6, 12, 14, 21, 2

$$2. 8^{2/3} = (\sqrt[3]{8})^2 = 2^2 = \textcircled{4}$$

$$6. (-32)^{-3/5} = \frac{1}{(-32)^{3/5}}$$

$$\frac{1}{(\sqrt[5]{-32})^3} = \frac{1}{(-2)^3} = \textcircled{-\frac{1}{8}}$$

$$12. \left(\frac{1}{64}\right)^{-2/3} = \left(\frac{64}{1}\right)^{2/3}$$

sidebar: $\frac{1}{2^{-3}} = 2^3$

$$\left(\frac{4}{5}\right)^{-1} = \frac{5}{4}$$

$$64^{2/3} = (\sqrt[3]{64})^2 = 4^2 = \textcircled{16}$$

$$14. 16^{-3/4} = \frac{1}{16^{3/4}}$$

$$\left(\frac{1}{\sqrt[4]{16}}\right)^3 = \frac{1}{2^3} = \left(\frac{1}{8}\right)$$

$$16^{3/4} = 8 \quad 16^{-3/4} = \frac{1}{8}$$

$$21. \left(\frac{8}{27}\right)^{-2/3}$$

$$\left(\frac{27}{8}\right)^{2/3} = \left(\frac{\sqrt[3]{27}}{\sqrt[3]{8}}\right)^2 = \left(\frac{3}{2}\right)^2 = \left(\frac{9}{4}\right)$$

HW Assessment
4/2/10

11. $(-8)^{2/3}$