

2, 6, 8, 12, 14

$$6. (-32)^{-3/5}$$

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

$$\frac{1}{(-2)^3} = \left(\frac{1}{-8}\right)$$

$$8. \left(\frac{4}{81}\right)^{3/2} = \left(\frac{\sqrt{4}}{\sqrt{81}}\right)^3 = \left(\frac{2}{9}\right)^3$$

$$\left(\frac{8}{729}\right)$$

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

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

$$14. 16^{-3/4}$$

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

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

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

Homework Assessment

4/2/10

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