

$$36^{0.5}$$

$$36^{5/10}$$

$$\underline{36}^{1/2 \text{ index}}^{\text{exp}}$$

$$(\sqrt{36})^1$$

$$(6)^1$$

$$6$$

$$32^{0.2}$$

$$32^{2/10}$$

$$\underline{32}^{1/5 \text{ index}}^{\text{exp}}$$

$$(\sqrt[5]{32})^1$$

$$(2)^1$$

$$2$$

$$81^{3/4}$$

$$\underline{81}^{3/4 \text{ index}}^{\text{exp}}$$

$$(\sqrt[4]{81})^3$$

$$(3)^3$$

$$27$$

$$25^{-3/2}$$

$$\left(\frac{1}{25}\right)^{3/2}$$

$$\frac{(1)^{\overset{\text{exp}}{3}} \underset{\text{index}}{2}}{(25)^{3/2}}$$

$$\frac{(\sqrt{1})^3}{(\sqrt{25})^3}$$

$$\frac{(1)^3}{(5)^2}$$

$$\left(\frac{1}{25}\right)$$

$$\left(\frac{36}{49}\right)^{-0.5}$$

$$\left(\frac{36}{49}\right)^{-1/2}$$

$$\left(\frac{49}{36}\right)^{1/2}$$

$$\frac{(49)^{\overset{\text{exp}}{1/2}} \underset{\text{index}}{2}}{(36)^{1/2}}$$

$$\frac{(\sqrt{49})^1}{(\sqrt{36})^1}$$

$$\left(\frac{7}{6}\right)$$

$$\left(\frac{27}{64}\right)^{-2/3}$$

$$\left(\frac{64}{27}\right)^{2/3}$$

$$\frac{(64)^{\overset{\text{exp}}{2/3}} \underset{\text{index}}{3}}{(27)^{2/3}}$$

$$\frac{(\sqrt[3]{64})^2}{(\sqrt[3]{27})^2}$$

$$\frac{(4)^2}{(3)^2}$$

$$\left(\frac{16}{9}\right)$$

$$(-32)^{-2/5}$$

$$\left(-\frac{1}{32}\right)^{2/5}$$

$$\frac{(-1)^{2/5}}{(32)^{2/5}}$$

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

$$\frac{(-1)^2}{(2)^2}$$

$$\left(\frac{1}{4}\right)$$

$$-32^{-2/5}$$

$$-\left(\frac{1}{32}\right)^{2/5}$$

$$-\frac{(1)^{2/5}}{(32)^{2/5}}$$

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

$$-\frac{(1)^2}{(2)^2}$$

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

$$(-243)^{0.6}$$

$$-243^{0.6}$$

## Arrange Greatest to Least

$$4^{-2} \quad 4^{1/2} \quad (\sqrt{4})^3 \quad (\sqrt{4})^{-3}$$

$$4^{-2} \quad 4^{1/2} \quad 4^{3/2} \quad 4^{-3/2}$$

$$4^{-2} \quad 4^{0.5} \quad 4^{1.5} \quad 4^{-1.5}$$

$$4^{1.5}, 4^{0.5}, 4^{-1.5}, 4^{-2}$$

## Write as a radical

a)  $25^{3/2}$

$$\left(\sqrt{25}\right)^3$$

$$\left(\sqrt{25}\right)^3$$

b)  $27^{1/3}$

$$\left(\sqrt[3]{27}\right)^1$$

$$\sqrt[3]{27}$$

## Answers to Review:

① c

⑥ b

② b

⑦ c

③ a

⑧ b

④ c

⑨ c

⑤ b

## Short Answer:

a)  $\left(\frac{25}{36}\right)^{3/2}$

b)  $(27)^{-4/3}$

$$\frac{(25)^{3/2}}{(36)^{3/2}}$$

$$\left(\frac{1}{27}\right)^{4/3}$$

$$\frac{(\sqrt{25})^3}{(\sqrt{36})^3}$$

$$\frac{(\sqrt[3]{1})^4}{(\sqrt[3]{27})^4}$$

$$\frac{(5)^3}{(6)^3}$$

$$\frac{(1)^4}{(3)^4}$$

$$\frac{125}{216}$$

$$\frac{1}{81}$$