

Semana 3

$$1) (a^5)^3 = a^{15}$$

$$2) (7^2)^3 = 7 \times 7 \times 7 \times 7 \times 7 \times 7 = 7^6$$

$$3) ((4^2)^2)^3 = 4^{12}$$

$$4) ((x^2)^3)^5 = x^{30}$$

$$5) (-2^2)^2 = (4^2) = 4^2$$

$$6) \left(\frac{5}{3}\right)^3 = \frac{5^3}{3^3} = \frac{125}{27}$$

$$7) \left(\frac{7}{4}\right)^2 = \frac{7^2}{4^2} = \frac{49}{16}$$

$$8) \left(\frac{3}{2}\right)^4 = \frac{3^4}{2^4} = \frac{81}{16}$$

$$9) \left(\frac{7}{2}\right)^5 = \frac{7^5}{2^5} = \frac{16807}{32}$$

$$10) \left(\frac{9}{4}\right)^2 = \frac{9^2}{4^2} = \frac{81}{16}$$

Resuelva los siguientes ejercicios radicales

$$1) \sqrt{5^4} = 25$$

$$2) \sqrt{625} = 25$$

$$2) \sqrt[3]{3^6} = 9$$

$$\sqrt[3]{729} = 9$$

$$3) \sqrt[3]{8^3} = 8$$

$$\sqrt[3]{512} = 8$$

$$4) \sqrt{-16} = 4$$

$$\sqrt{-1-16}$$

$$= \sqrt{-1} - \sqrt{16}$$

$$5) \sqrt[3]{-27} = -3$$

$$\begin{array}{r|l} 27 & 3 \cdot 3^3 = 3 \cdot 3 \cdot 3 = 27 \\ 9 & 3 \\ 3 & 3 \\ 1 & \end{array}$$