

$$= 2^{4x-2} \cdot 2^{x-3}$$

$$(2^2) 2^{2-x}$$

$$= 2^{4x-2+(x-3)}$$

$$2^{2+2-x}$$

$$= 2^{5x-5-(4-x)}$$

$$= 2^{5x-5-4+x}$$

$$= 2^{6x-9}$$

6.) Bentuk pangkat positif $\left(\frac{3a^{-2}b^3c^4}{15a^3b^{-5}c^{-2}} \right)^{-1}$

$$= \left(\frac{1}{5} a^{-2-3} b^{3-(-5)} c^{4-(-2)} \right)^{-1}$$

$$= \left(\frac{1}{5} a^{-5} b^8 c^6 \right)^{-1}$$

$$= 5a^5 b^{-8} c^{-6}$$

$$= \frac{5a^5}{b^8 c^6}$$

$$b^8 c^6$$

7.) $\left(\frac{2x y^2}{3x^2 y} \right)^3 = \left(\frac{4xy}{3x^2 y^3} \right)^2 \cdot \left(\frac{2y}{3x} \right)^3 \cdot \left(\frac{4}{3xy^2} \right)^2$

$$= \frac{8y^3}{27x^3} \cdot \frac{16}{9x^2 y^4}$$

$$= \frac{8y^3}{27x^3} \times \frac{16}{9x^2 y^4}$$

$$= \frac{y^3}{3x} \times \frac{y^4}{2} = \frac{y^7}{6x}$$

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