

$$1 \text{ (i)} \quad 3^{-2}$$

$$= \frac{1}{3^2}$$

$$= \frac{1}{9}$$

$$[\because x^{-m} = \frac{1}{x^m}]$$

$$1 \text{ (ii)} \quad (-4)^{-2}$$

$$= \frac{1}{(-4)^2}$$

$$= \frac{1}{16}$$

Download NCERT Exemplar Solutions from DevAnoop.Me

$$1 \text{ (iii)} \quad \left(\frac{1}{2}\right)^{-5}$$

$$= 2^5$$

$$= 32$$

$$2 \text{ (i)} \quad (-4)^5 \div (-4)^8$$

$$= (-4)^{5-8}$$

$$= (-4)^{-3}$$

$$= \left(-\frac{1}{4}\right)^3$$

$$[\because x^m \div x^n = x^{m-n}]$$

$$2 \text{ (ii)} \quad \left(\frac{1}{2^3}\right)^2$$

$$= \frac{1^2}{2^{3 \times 2}}$$

$$= \frac{1^6}{2^6}$$

$$= \left(\frac{1}{2}\right)^6$$

$$\left(\frac{x}{y}\right)^m = \frac{x^m}{y^m}$$