

$$\textcircled{1} \quad x^2 \cdot x^6$$
$$\boxed{x^8}$$

$$\textcircled{2} \quad (-5p^5)(8p^4)$$
$$\boxed{-40p^9}$$

$$\textcircled{3} \quad a^3 \cdot a^2 \cdot a^4$$
$$\boxed{a^9}$$

$$\textcircled{4} \quad (x^3)^9$$
$$\boxed{x^{27}}$$

$$\textcircled{5} \quad (5^5)^8$$
$$\boxed{5^{40}}$$

$$\textcircled{6} \quad (ab)^8$$
$$\boxed{a^8 b^8}$$

$$\textcircled{7} \quad (-2a)^3$$
$$\boxed{-8a^3}$$

$$\textcircled{8} \quad (x^4 y)^2$$
$$\boxed{x^8 y^2}$$

$$\textcircled{9} \quad (4a^3 b)^3$$
$$\boxed{64 a^9 b^3}$$

$$\textcircled{10} \quad \left(\frac{xy}{2}\right)^2$$
$$\frac{x^2 y^2}{2^2}$$
$$\boxed{\frac{x^2 y^2}{4}}$$

$$\textcircled{11} \quad \left(\frac{pm^4}{q^6}\right)^5$$
$$\boxed{\frac{p^5 m^{20}}{q^{30}}}$$

$$\textcircled{12} \quad \frac{x^5}{x^4}$$
$$\boxed{x}$$

$$\textcircled{13} \quad \frac{s^{13} t^6}{s^2 t}$$
$$\boxed{s^{11} t^5}$$

$$\textcircled{14} \quad \frac{40m^{14} n^{10}}{8m^{18} n^7}$$
$$\boxed{5mn^3}$$

$$\textcircled{15} \quad -7y^0$$
$$\boxed{-7}$$

$$\textcircled{16} \quad (7b)^0$$
$$\boxed{1}$$

$$\textcircled{17} \quad \frac{7a^{15} b^{10} c^7}{abc}$$
$$\boxed{7a^{14} b^{10} c^6}$$

$$\textcircled{18} \quad \frac{(x^2)^4}{(4x)^3}$$
$$\frac{x^8}{4^3 x^3} = \frac{x^8}{64 x^3} = \boxed{\frac{x^5}{64}}$$

$$\textcircled{19} \quad \left(\frac{20t^3}{105^4}\right)^2$$
$$\left(\frac{2t^3}{5^4}\right)^2 = \frac{2^2 t^6}{5^8} = \boxed{\frac{4t^6}{5^8}}$$

$$\textcircled{20} \quad \left(\frac{1}{5}\right)^{-2} = \left(\frac{5}{1}\right)^2 = \frac{5^2}{1^2} = \frac{25}{1} = \boxed{25}$$

$$\textcircled{21} \quad \frac{y^{-9}}{y^2} = \frac{1}{y^2 y^9} = \boxed{\frac{1}{y^{11}}}$$

$$\textcircled{22} \quad r^{-5} = \boxed{\frac{1}{r^5}}$$

$$\textcircled{23} \quad -4z^{-4} = \boxed{-\frac{4}{z^4}}$$

$$\textcircled{24} \quad \frac{x^6 (x^{-6})^{-9}}{(x^{-7})^{-8}} = \frac{x^6 x^{54}}{x^{56}} = \frac{x^{60}}{x^{56}} = \boxed{x^4}$$

$$\textcircled{25} \quad \left(\frac{xy^5}{x^3 y}\right)^{-2} = \frac{x^{-2} y^{-10}}{x^{-6} y^{-2}} = \frac{x^4 y^2}{x^2 y^{10}} = \boxed{\frac{x^2}{y^8}}$$