2, 6, 4, 8, 5

2. $(3 \cdot 5)^{-1} = 15^{-1} = \frac{1}{15}$

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

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

5. $(2^{-2} \cdot 3^{-1} \cdot 5^0)^{-1}$

$2^2 \cdot 3 \cdot 5^0$

$2^2 \cdot 3 \cdot 1 = 4 \cdot 3 = 12$

6. $5^{-1}(3^{-2} \cdot 2^{-3})^0$

$\frac{1}{5} \cdot 1 = \frac{1}{5}$

8. $\left(\frac{3}{4}\right)^{-1} \cdot \left(\frac{4}{3}\right)^{-2}$

$\frac{4}{3} \cdot \frac{3^2}{4^2} = \frac{4 \cdot 9}{3 \cdot 16} = \frac{36}{48}$

$\frac{3}{4}$ $\frac{3}{4}$

$$\frac{(3a^3)^{-2}}{a^{-3}b^{-3}} = \frac{3^{-2}a^{-6}}{a^{-3}b^{-3}}$$

$$\frac{a^3b^3}{3^2a^3} = \frac{b^3}{9a^3}$$

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

$$\frac{a^2 \cdot a^2 b^4}{b} = a^4b^3$$

32. $\left(\frac{2pq^{-1}}{4q^2}\right)^{-1}$

33. $\left(\frac{x}{y^2}\right)^{-1}\left(\frac{x^{-2}}{y}\right)^{2}$