

Simplify. Your answer should contain only positive exponents.

$$1) 2m^2 \cdot 2m^3$$
$$4m^5$$

$$2) m^4 \cdot 2m^{-3}$$
$$2m$$

$$3) 4r^{-3} \cdot 2r^2$$
$$\frac{8}{r}$$

$$4) 4n^4 \cdot 2n^{-3}$$
$$8n$$

$$5) 2k^4 \cdot 4k$$
$$8k^5$$

$$6) 2x^3y^{-3} \cdot 2x^{-1}y^3$$
$$4x^2$$

$$7) 2y^2 \cdot 3x$$
$$6y^2x$$

$$8) 4v^3 \cdot vu^2$$
$$4v^4u^2$$

$$9) 4a^3b^2 \cdot 3a^{-4}b^{-3}$$
$$\frac{12}{ab}$$

$$10) x^2y^{-4} \cdot x^3y^2$$
$$\frac{x^5}{y^2}$$

$$11) (x^2)^0$$
$$1$$

$$12) (2x^2)^{-4}$$
$$\frac{1}{16x^8}$$

$$13) (4r^0)^4$$
$$256$$

$$14) (4a^3)^2$$
$$16a^6$$

$$15) (3k^4)^4$$
$$81k^{16}$$

$$16) (4xy)^{-1}$$
$$\frac{1}{4xy}$$