

#1

$$c^4 \cdot c^7 \cdot c$$

answer:  $c^{12}$

#2

$$(3^5)^3$$

answer:  $3^{15}$

#3

$$8^{-9} \cdot 8^{12}$$

answer:  $8^3$  or 512

#4

$$(2j)^{-1}$$

answer:  $\frac{1}{2j}$

#5

$$(6h)(12^0)$$

answer:  $6h$

#6

$$(m^{-3})^{-7}$$

answer:  $m^{21}$

#7

$$\left(-\frac{2}{3}\right)^4$$

answer:  $\frac{16}{81}$

#8

$$\frac{1}{d^6} \cdot d^{12}$$

answer:  $d^6$

#9

$$(5a^4b)^2(-2ab^5)^4$$

answer:  $400a^{12}b^{22}$

#10

$$(6xy^7)^3(4x^8)$$

answer:  $864x^{11}y^{21}$

#11

$$(-7n)^{-3}$$

$$\text{answer: } -\frac{1}{343n^3}$$

#12

$$(4k^9)(3k^{13})$$

$$\text{answer: } 12k^{22}$$

#13

$$\frac{(g^3 \cdot g^5)^8}{g^{10}}$$

$$\text{answer: } g^{54}$$

#14

$$\frac{f^{-4} \cdot f^4}{f^8}$$

$$\text{answer: } \frac{1}{f^8}$$

#15

$$\frac{3xy^5}{6xy^6} \cdot \frac{-12xy}{3x^5y}$$

$$\text{answer: } \frac{-2}{x^4y}$$

#16

$$\frac{3x^5y}{x^6y^3} \cdot \frac{8x^{10}y^3}{4x^5}$$

$$\text{answer: } 6x^4y$$

#17

$$(xy^{-8})(xy)^5$$

$$\text{answer: } \frac{x^6}{y^3}$$

#18

$$\frac{12x^{-3}y^{-4}}{5x^{-6}} \cdot \frac{10x^{-4}y}{4y^{-9}}$$

$$\text{answer: } \frac{6y^6}{x}$$

#19

$$(5^3)^{\frac{1}{3}}(4x^5)^2$$

$$\text{answer: } 80x^{10}$$

#20

$$a^{\frac{1}{2}}b^0\left(a^{\frac{3}{4}}\right)$$

$$\text{answer: } a^{5/4}$$