

I

Simplify using the Laws of
Exponents

$$2^4 \cdot 2^3$$

If you got: $4k^3$

II

Simplify using the Laws of
Exponents

$$c^3 \cdot c^5$$

If you got: y^3

III

Simplify using the Laws of
Exponents

$$-2m(-8m^5)$$

If you got: 3^4

IV

Simplify using the Laws of
Exponents

$$9^3 \cdot 9^2$$

If you got: $5^2 \cdot 7^2 \cdot 8$ or 9,800

V

Simplify using the Laws of Exponents

$$-3x^4 \cdot 5x^3$$

If you got: $(-2)^3 \cdot 3^3 \cdot 5^3$ or $-27,000$

VI

Simplify using the Laws of Exponents

$$\frac{3^7}{3^3}$$

If you got: c^8

VII

Simplify using the Laws of
Exponents

$$\frac{n^9}{n^4}$$

If you got: 2^7

VIII

Simplify using the Laws of
Exponents

$$\frac{12w^5}{2w^3}$$

If you got: $-15x^7$

IX

Simplify using the Laws of Exponents

$$\frac{3^4 \cdot 5^2 \cdot 8^3}{3^2 \cdot 5 \cdot 8^2}$$

If you got: $16m^6$

X

Simplify using the Laws of Exponents

$$\frac{(-2)^5 \cdot 3^4 \cdot 5^7}{(-2)^2 \cdot 3 \cdot 5^4}$$

If you got: n^5

XI

Simplify using the Laws of Exponents

$$\frac{5^6 \cdot 7^4 \cdot 8^3}{5^4 \cdot 7^2 \cdot 8^2}$$

If you got: $3^2 \cdot 5 \cdot 8$ or 360

XII

Simplify using the Laws of Exponents

$$\frac{x^{10}}{x^3}$$

If you got: 9^5

XIII

Simplify using the Laws of
Exponents

$$\frac{24k^9}{6k^6}$$

If you got: x^7

XIV

Simplify using the Laws of
Exponents

$$\frac{y^8}{y^5}$$

If you got: $6w^2$

Problem Answers:

1. 2^7
2. C^8
3. $16m^6$
4. 9^5
5. $-15x^7$
6. 3^4
7. N^5
8. $6w^2$
9. $3^2 \cdot 5 \cdot 8$ or 360
10. $(-2)^3 \cdot 3^3 \cdot 5^3$ or -27,000
11. $5^2 \cdot 7^2 \cdot 8$ or 9,800
12. X^7
13. $4k^3$
14. y^3

Answer Key:

If you start with #1

1	→	7
7	→	10
10	→	5
5	→	8
8	→	14
14	→	2
2	→	6
6	→	3
3	→	9
9	→	11
11	→	4
4	→	12
12	→	13
13	→	1