



How Did the Absent-Minded Professor Burn His Fat?

Simplify the expression. Write the letter of the exercise in the box that contains the number of the answer.

$$E \quad n^2 \cdot n^5$$

$$N \quad (n^2)^5$$

$$H \quad (n^{-2})^5$$

$$A \quad (n^9)^4 n^3$$

$$O \quad (n^2)(n^3)^{-2}$$

$$I \quad (n^4)^{-3}(n^4)^{-1}$$

$$F \quad (n^{10})_{10}(n^{-8})^3$$

$$29 \quad n^{76}$$

$$20 \quad n^{81}$$

$$33 \quad n^{10}$$

$$27 \quad \frac{n^4}{1}$$

$$4 \quad \frac{n^{12}}{1}$$

$$31 \quad n^{42}$$

$$18 \quad n^7$$

$$5 \quad n^{39}$$

$$8 \quad \frac{n^{16}}{1}$$

$$22 \quad \frac{n^{10}}{1}$$

Answers • Part 1

$$N \quad (7d)^2$$

$$H \quad (4d^2)^3$$

$$S \quad (-4d^2)^3$$

$$A \quad (4d^2)^{-3}$$

$$O \quad (-5d)^2(d^3)^2$$

$$F \quad 8(d^2)^2(-2d)^3$$

$$H \quad (3d^5)^{-4}(d^{-1})^9$$

$$23 \quad -64d^7$$

$$6 \quad -64d^6$$

$$13 \quad 49d^2$$

$$9 \quad \frac{81d^{18}}{1}$$

$$32 \quad \frac{64d^6}{1}$$

$$17 \quad 64d^6$$

$$30 \quad 25d^{10}$$

$$10 \quad 25d^8$$

$$1 \quad \frac{81d^{29}}{1}$$

$$12 \quad \frac{d^9}{64}$$

Answers • Part 2

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|------------------|--------------|----|---------------------|----|----------------|----|--------------------------|----|--------------------------|----|--------------------------|----|-------------------------|
| I | $(x^5y^4)^2$ | N | $(10xy^2)^3(x^2)^2$ | H | $(-x^3y^8)^3$ | F | $(x^2y^5)(x^2y^5)$ | G | $(9x^3y^4)^2(xy)^{-6}$ | T | $(3x^{-2})^4(x^2y^4)^3$ | W | $(-5y^{-5})^3(-x^4y)^2$ |
| 14 | $81y^2$ | 12 | $x^{10}y^8$ | 2 | $x^{12}y_{10}$ | 16 | $\frac{81y^7}{x^4}$ | 25 | $-\frac{125x^9}{y^{12}}$ | 21 | $\frac{81y^{12}}{x^2}$ | 19 | $1000x^5y^6$ |
| 3 | $1000x^6y^2$ | 26 | $-x^9y^{24}$ | 17 | $1000x^5y^6$ | 4 | $-\frac{y^{13}}{125x^8}$ | 15 | $-\frac{y^{13}}{125x^9}$ | 25 | $-\frac{y^{12}}{125x^9}$ | | |
| Answers • Part 3 | | | | | | | | | | | | | |

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|------------------|----------------|----|----------------------|----|--------------------|----|---------------------|---|-----------------------------|----|---------------------|---|---------------------|
| N | $(-6m^7t^4)^2$ | R | $(3m^2t)^2(3m^2t^2)$ | W | $(-2mt)^3(-2mt^3)$ | G | $-m^5t^2(15mt^5)^2$ | N | $(4mt^{-3})^2(-4m^{-3}t)^2$ | P | $(5mt)^2 + 5m^2t^2$ | R | $(mt^4)^{-1}(mt^4)$ |
| 25 | $30m^2t^2$ | 34 | $-225m^7t_{12}$ | 16 | $16m^4t_6$ | 24 | $-225m^6t_{10}$ | 9 | 1 | 11 | $36m^{14}t_8$ | 7 | $27m^5t_6$ |
| 15 | $256m^2t^3$ | 28 | $\frac{m^4t^4}{256}$ | | | | | | | | | | |
| Answers • Part 4 | | | | | | | | | | | | | |

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|------------------|----------------|----|------------------------|----|--------------------|----|---------------------|---|-------------------------------|----|---------------------|----|----------------------|
| N | $(-6m^7t^4)^2$ | R | $(3m^2t)^2(3m^2t^2)^2$ | W | $(-2mt)^3(-2mt^3)$ | G | $-m^5t^2(15mt^5)^2$ | N | $(4mt^{-3})^2(-4m^{-3}t^2)^2$ | P | $(5mt)^2 + 5m^2t^2$ | R | $(mt^4)^{-1}(mt^4)$ |
| 25 | $30m^2t^2$ | 34 | $-225m^7t^{12}$ | 16 | $16m^4t^6$ | 24 | $-225m^6t^{10}$ | 9 | 1 | 31 | $27m^6t^4$ | 15 | $\frac{256m^2}{t^3}$ |
| | | | | | | | | | | 7 | $27m^5t^6$ | 28 | $\frac{256}{m^4t^4}$ |
| Answers • Part 4 | | | | | | | | | | | | | |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
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