

# What Happened to the Man Who Invested in a Paper Towel Company and a Revolving Door Factory?

Simplify each expression. Find the answer below and notice the two letters next to it. Write these letters in the two boxes above the exercise number at the bottom of the page.

- 1  $7x^2 + 3x - x^2$   
 2  $(7x^2)(3x)(-x^2)$   
 3  $(-2x^3)(5x)(-8x^4)$   
 4  $x(3x^2)^3$   
 5  $-4x(-5x)^2$   
 6  $(2x^4)(-6x^3) + (9x)(3x^6)$

Answers:

- IN  $20x^{11}$  OR  $-100x^3$   
 SW  $27x^7$  ED  $6x^2 + 3x$   
 EC  $-21x^5$  LA  $36x^7$   
 HE  $15x^7$  OU  $80x^8$

- 7  $a^2 + b + a^2 + b^2 + b$   
 8  $(-2a^3b)^4$   
 9  $a^2(6a^3b)(ab^5)$   
 10  $(4ab^3)(-5b^6)(2a^2)$   
 11  $(3a^4b)(5ab^2) - (a^5b^2)(9b)$   
 12  $(7a^2b^2)^2 + (ab)^4 - 50$

Answers:

- OU  $6a^6b^6$  LD  $2a^2 + b^2 + 2b$   
 ER  $6a^7b^4$  RN  $-40a^3b^9$   
 TB  $16a^{12}b^4$  ND  $50a^4b^4 - 50$   
 EH  $6a^5b^3$  TO  $-40a^4b^6$

- 13  $(8x^2y)(x^4y^3)^2$   
 14  $2x(-5y^6)^3$   
 15  $(xy^2)^3(x^2y)^2 + (x^3y^4)(x^2y^2)^2$   
 16  $(-x^2)^5(-2x^2y^3)^3$   
 17  $(4xy^7)(2x^4y) - (5x^3y^3)(-8x^2y^5)$   
 18  $(3x^2)(3y^2) + 3x^2y - (3xy)^2 - 3xy^2$

Answers:

- SO  $18x^6y^9$  TU  $48x^5y^8$   
 WA  $8x^{10}y^7$  EF  $-250xy^{18}$   
 HA  $8x^{12}y^8$  IP  $3x^2y - 3xy^2$   
 AR  $2x^7y^8$  OU  $8x^{16}y^9$

6	13	4	18	1	16	8	14	5	11	2	9	7	17	10	15	3	12									

# Why Are Babies Like Hinges ?

Simplify each expression below and find your answer in the set of answers to the right of that exercise. Write the letter of your answer in the box that contains the number of that exercise.

$$\textcircled{1} \frac{n^9}{n^5}$$

$$\textcircled{3} \frac{2n^4}{n}$$

$$\textcircled{A} 2n^6$$

$$\textcircled{E} 2n^3$$

$$\textcircled{2} \frac{n^{12}}{n^3}$$

$$\textcircled{4} \frac{6n^2}{3n^5}$$

$$\textcircled{H} n^9$$

$$\textcircled{T} n^4$$

$$\textcircled{R} \frac{2}{n^6}$$

$$\textcircled{Y} \frac{2}{n^3}$$

$$\textcircled{5} \frac{x^3y^4}{x^2y}$$

$$\textcircled{7} \frac{8xy^2}{12x^3y^5}$$

$$\textcircled{R} -4x^3$$

$$\textcircled{A} xy^3$$

$$\textcircled{S} -4y^4$$

$$\textcircled{T} -4y^7$$

$$\textcircled{6} \frac{-8x^6y^2}{2x^3y^2}$$

$$\textcircled{8} \frac{20x^3y^8}{-5x^3y}$$

$$\textcircled{E} \frac{2}{3x^2y^3}$$

$$\textcircled{U} \frac{2}{3xy^4}$$

$$\textcircled{9} \frac{3a^5b^2}{9a^2b^5}$$

$$\textcircled{11} \frac{-24a^2b}{18ab^5}$$

$$\textcircled{I} 5ab^8$$

$$\textcircled{A} 15a^2$$

$$\textcircled{L} 5ab^6$$

$$\textcircled{G} 15a^3$$

$$\textcircled{10} \frac{-15a^2b^9}{-3ab}$$

$$\textcircled{12} \frac{30a^9b^2}{2a^6b^2}$$

$$\textcircled{N} -\frac{4a}{3b^4}$$

$$\textcircled{H} \frac{a^3}{3b^3}$$

$$\textcircled{13} \frac{8u^4v^{10}}{-2u^2v^8}$$

$$\textcircled{15} \frac{-7u^2v^6}{uv^3}$$

$$\textcircled{B} -7uv^5$$

$$\textcircled{S} -4u^2v^2$$

$$\textcircled{O} -7uv^3$$

$$\textcircled{E} -4u^7v^2$$

$$\textcircled{14} \frac{13u^7v^7}{26u^7v}$$

$$\textcircled{16} \frac{-9u^8v^2}{-6u^2v^6}$$

$$\textcircled{T} \frac{v^6}{2}$$

$$\textcircled{A} \frac{3u^6}{2v^4}$$

$$\textcircled{17} \frac{14k^9m^3}{2km^3}$$

$$\textcircled{19} \frac{-3k^5m^6}{k^4m^3}$$

$$\textcircled{E} -3k$$

$$\textcircled{L} 7k^6m$$

$$\textcircled{D} 7k^8$$

$$\textcircled{R} -3km^3$$

$$\textcircled{18} \frac{4k^2m^2}{16k^5m^3}$$

$$\textcircled{20} \frac{12km^3}{-4m^3}$$

$$\textcircled{O} \frac{1}{4k^3m}$$

$$\textcircled{N} \frac{1}{4km^2}$$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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