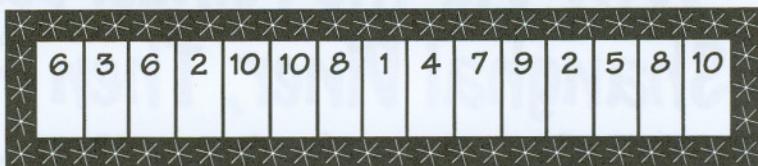


WHY ISN'T A SNOWMAN VERY SMART?

Simplify the expression. For each set of exercises, there is one extra answer. Write the letter of this answer in each box that contains the number of that exercise set.



1 a. $n^2 \cdot n^3$ b. $n^7 \cdot n^4$ c. $2n^5 \cdot 5n$ d. $10n^3 \cdot n^8$	Answers (C) $10n^6$ (T) n^5 (E) $10n^{11}$ (O) $10n^8$ (J) n^{11}	6 a. $\frac{m^8}{m^3}$ b. $\frac{m^3}{m^8}$ c. $\frac{40m^{11}}{8m^4}$	Answers (G) $\frac{1}{m^5}$ (H) $5m^{15}$ (B) $\frac{1}{5m^7}$ (M) $5m^7$
2 a. $(y^3)^2$ b. $(y^5)^2$ c. $(7y^2)^2$ d. $(5y^4)^3$	Answers (B) $125y^{12}$ (A) $15y^8$ (R) y^{10} (U) $49y^4$ (L) y^6	7 a. $t^6 \cdot t^5$ b. $t^6 + t^5$ c. $3t \cdot 8t^3$ d. $3t + 8t^3$	Answers (K) $24t^4$ (L) t^{11} (N) $3t + 8t^3$ (B) $11t^8$ (C) $t^6 + t^5$
3 a. $\frac{v^5}{v^2}$ b. $\frac{v^9}{v^4}$ c. $\frac{20v^8}{5v}$ d. $\frac{44v^7}{11v^6}$	Answers (H) $4v$ (N) v^5 (I) v^3 (T) $4v^7$ (E) $4v^5$	8 a. $(15k)^2$ b. $15k + 15k$ c. $(2k^6)^5$ d. $(2k^5)^6$	Answers (L) $30k$ (D) $225k^2$ (N) $30k^{30}$ (R) $32k^{30}$ (G) $64k^{30}$
4 a. $2a^3 \cdot 5a^3$ b. $2a^3 + 5a^3$ c. $9a^8 \cdot 4a^8$ d. $9a^8 + 4a^8$	Answers (L) $10a^6$ (N) $36a^{16}$ (W) $13a^{16}$ (D) $7a^3$ (R) $13a^8$	9 a. $\frac{49x^7}{7x^2}$ b. $\frac{49x^2}{7x^7}$ c. $\frac{7x^7}{49x^2}$	Answers (U) $\frac{1}{7x^5}$ (R) $7x$ (L) $7x^5$
5 a. $(4q)^3$ b. $4q + 4q + 4q$ c. $(q^3)^4$ d. $q^3 + q^3 + q^3 + q^3$	Answers (T) $12q$ (I) $4q^{12}$ (R) $64q^3$ (P) $4q^3$ (F) q^{12}	10 a. $(-w^3)^2$ b. $(-w^3)^3$ c. $(-w^3)^4$ d. $(-w^3)^5$	Answers (T) w^6 (F) w^{12} (D) $-w^{15}$ (P) $-w^9$ (S) $-w^{12}$

What Do You Call a Bar of Soap That Doesn't Clean?

Simplify the expression, then cross out the letter pair next to the answer. For each letter pair that you DON'T cross out, write the upper case letter in the box containing the lower case letter.

1 $x^2 \cdot x^5$

f • P $12x^5$

7 $(ab^3)(a^3b)$

b • S $14a^5b^7$

2 $7x^3 \cdot x$

d • H x^{11}

8 $(2ab)(3ab^5)$

1 • B $6a^3b^5$

3 $4x^4 \cdot 3x$

e • J x^7

9 $(-4ab^2)(9a^5b)$

n • N $-36a^3b^7$

4 $x \cdot x^3 \cdot x^9$

b • O x^{13}

10 $ab(-8a^3b^2)$

p • X $6a^2b^6$

5 $(-5x^7)(-6x^2)$

g • T $7x^4$

11 $(-2a^4b)(-7ab^6)$

j • G $-8a^4b^3$

6 $x(-x^5)(-x^5)$

l • W $30x^9$

12 $-3a(12a^2b^7)$

k • C a^4b^4

13 $(5m^3)(-m^8t^2)$

n • L $16m^5t^8$

19 $(n^2)^3$

f • B $81n^{18}$

14 $(-4m^4t)(15t^5)$

k • I $-5m^{11}t^2$

20 $(-n^5)^2$

p • T $-8n^{12}$

15 $(11m^4t^9)(7mt)$

j • D $6m^5t^{10}$

21 $(5n^8)^2$

c • N $25n^{16}$

16 $(3m^2)(m^3t^3)(2mt^2)$

g • T $77m^5t^{10}$

22 $(-2n^4)^3$

d • L $81n^{36}$

17 $(-8mt^4)(-2t)(m^4t^3)$

i • M $-60m^8t^6$

23 $(10n)^3$

m • I n^6

18 $3t^5(-mt)(20m^7)$

f • N $6m^6t^5$

24 $(-3n^9)^4$

n • D $-8n^{16}$

25 $(3x^2y^3)^2$

k • U $81x^{20}y^6$

31 $2kd(5k^2d)^2$

i • R $-81k^2d^{11}$

26 $(5x^4y)^3$

a • S $9x^4y^6$

32 $-d(9kd^5)^2$

q • T k^8d^6

27 $(-7x^5y^2)^2$

g • L $-32x^{10}y^{15}$

33 $(-kd)^2(-kd^2)$

c • S $-k^3d^4$

28 $(-4xy^8)^3$

d • R $49x^{12}y^4$

34 $(-2k)^4(-k^2)(-d)^2$

g • B $-81kd^7$

29 $(-2x^2y^3)^5$

q • E $125x^{12}y^3$

35 $(kd^8)(kd)^8(k^8d)$

m • I $k^{17}d^{17}$

30 $(3x^7y^2)^4$

i • N $-64x^3y^{24}$

36 $(-k^2d)^3(-k^2d^3)$

a • H $50k^5d^3$

c • T $81x^{28}y^8$

37 $(-k^2d)^3(-k^2d^3)$

p • D $k^{15}d^{12}$

p • G $49x^{10}y^4$

38 $(-k^2d)^3(-k^2d^3)$

o • A $-16k^6d^2$

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
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Why Was the Deck of Cards Always in Trouble?



Simplify the expression. For each set of exercises, there is one extra answer. Write the letter of this answer in each box containing the number of that set.

1	a. $\frac{20x^5}{5x^3}$	b. $\frac{-28x^4}{7x}$	P -4x ³	O -4x	V 4x ²
2	a. $\frac{26m^8n^2}{13m^5n}$	b. $\frac{-60m^9n^6}{-12mn^2}$	I 5m ³ n ²	A 2m ³ n	G 5m ⁸ n ⁴
3	a. $\frac{2ab^5}{a^4b^2}$	b. $\frac{-5a^2b^3}{10b^8}$	F $\frac{2b^3}{a^3}$	S $-\frac{2a^2}{b^3}$	T $-\frac{a^2}{2b^5}$
4	a. $\frac{(k^2e)^2}{k^3e}$	b. $\frac{(ke)^2(ke^2)}{k^2e}$	N ke ³	L ke	D k ² e ²
5	a. $\frac{(-3c^3d)^2}{2cd^3}$	b. $\frac{(-c)^3(-d^3)}{5c^8d}$	A $\frac{9c^5}{2d}$	R $\frac{d^2}{5c^5}$	E $\frac{9d}{5c^3}$
6	a. $\left(\frac{8x}{y^3}\right)^2$	b. $\left(\frac{x^5}{-2y^2}\right)^3$	B $-\frac{x^{15}}{8y^6}$	T $\frac{x^8}{8y^8}$	W $\frac{64x^2}{y^6}$
7	a. $\left(\frac{6ab^3}{3c^2}\right)^2$	b. $\left(\frac{a^2b^3c^4}{ac^2}\right)^3$	R $\frac{4a^3b^9}{c^4}$	N $a^3b^9c^6$	V $\frac{4a^2b^6}{c^4}$
8	a. $\frac{(-5vt)^2}{-5vt^2}$	b. $\frac{15(v^2t)^5}{3v^{10}}$	H 5vt ⁴	L -5v	A 5t ⁵
9	a. $\frac{(-3wh^3)^2}{9w^5h^8}$	b. $\frac{-w(-h)^4}{(-wh)^4}$	J $-\frac{1}{w^2h^2}$	F $-\frac{1}{w^3}$	B $\frac{1}{w^3h^2}$
10	a. $\left(\frac{5pq^3}{4p^3q}\right)^2$	b. $\left(\frac{-3q^5}{pq}\right)^3$	A $-\frac{27q^{12}}{p^3}$	L $-\frac{27q^6}{p^4}$	N $\frac{25q^4}{16p^4}$
11	a. $\frac{(-2n)^5}{-2n^5}$	b. $\frac{12n(-n)^3}{-60n^2}$	G $\frac{n^2}{5}$	B 16	K $\frac{n}{8}$
12	a. $\left(\frac{a^3}{7b^2}\right)^x$	b. $\left(\frac{7a^x}{7b^y}\right)^x$	P $\frac{a^{x^2}}{b^{xy}}$	M $\frac{a^{3x}}{7^x b^{2x}}$	W $\frac{a^{3x}}{7b^x}$

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