

Section 11 Answers

WHY ISN'T A SNOWMAN VERY SMART?

1a. n^5

b. n^{11}

c. $10n^6$

d. $10n^{11}$

2a. y^6

b. y^{10}

c. $49y^4$

d. $125y^{12}$

3a. v^3

b. v^5

c. $4v^7$

d. $4v$

4a. $10a^6$

b. $7a^3$

c. $36a^{16}$

d. $13a^8$

5a. $64a^3$

b. $12q$

c. q^{12}

d. $4q^3$

6a. m^5

b. $\frac{1}{m^5}$

c. $5m^7$

d. $\frac{1}{5m^7}$

7a. t^{11}

b. $t^6 + t^5$

c. $24t^4$

d. $3t + 8t^3$

8a. $225k^2$

b. $30k$

c. $32k^{30}$

d. $64k^{30}$

9a. $7x^5$

b. $\frac{7}{x^5}$

c. $\frac{x^5}{7}$

d. $\frac{1}{7x^5}$

10a. w^6

b. $-w^9$

c. w^{12}

d. $-w^{15}$

HE HAS SNOW BRAINS

Why Did the Panda Eat Dinner At the Shanghai Diner, Then Fire a Basketball Into the Trash Can Before Walking Out?

A $\frac{x^9}{x^2}$ $7n^2$	x^7 P x^{10} $4n^3 \cdot 3n$	$(x^5)^2$ A $\frac{4}{x^3}$ $4n^8$	$\frac{8x^2}{2x^5}$ N $(2x)^4$ $36n^2$	$16x^4$ D $5n + 5n$
$2n^2 + 5n^2$ A x^{24} n^9	$(x^8)^3$ E $\frac{15x^4}{3x}$ $n + n + n$	$5x^3$ A $27x^3$ $6n^2 \cdot 11n^2$	$(3x)^3$ T $\frac{x^5}{3}$ $9n^3$	$\frac{3x^7}{9x^2}$ S n^3
$n^4 \cdot n^5$ S $\frac{60x^5}{15x^4}$ $4n^4 + n^4$	$4x$ H $(4x^2)^3$ $30n^7$	$64x^6$ O $\frac{1}{5x^3}$ $11n^5$	$\frac{6x^2}{30x^5}$ O $144x^2$ $3 \cdot 5n^4$	$(12x)^2$ T $n^9 + 8n^9$
$5n^4$ S $(x^6)^6$ $6n \cdot n^6$	x^{36} A $\frac{49x^7}{7x^7}$ $21n^2$	7 N $125x^3$ $5n^2 \cdot 12$	$(5x)^3$ D $\frac{4}{x^7}$ $2n^6 + n$	$\frac{4x^3}{x^{10}}$ L $9n^4 \cdot 8n^3$
$6n^7$ E $\frac{36x^6}{3x}$ $8x^9$	$12x^5$ A $(2x^3)^3$ $8x^9$	$8x^9$ V $\frac{1}{4x^3}$ $60n^2$	$\frac{x^4}{4x^7}$ E $(3x^2)^4$ $n^6 + n + n^6$	$81x^8$ S $72n^7$

A PANDA EATS SHOOTS AND LEAVES

11.2

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

1. x^7

7. a^4b^4

13. $-5m^{11}t^2$

2. $7x^4$

8. $6a^2b^6$

14. $-60m^4t^6$

3. $12x^5$

9. $-36a^6b^3$

15. $77m^5t^{10}$

4. x^{13}

10. $-8a^4b^3$

16. $6m^6t^5$

5. $30x^9$

11. $14a^5b^7$

17. $16m^5t^8$

6. x^{11}

12. $-36a^3b^7$

18. $-60m^8t^6$

19. n^6

25. $9x^4y^6$

31. $50k^5d^3$

20. n^{10}

26. $125x^{12}y^3$

32. $-81k^2d^{11}$

21. $25n^{16}$

27. $49x^{10}y^4$

33. $-k^3d^4$

22. $-8n^{12}$

28. $-64x^3y^{24}$

34. $-16k^6d^2$

23. $1000n^3$

29. $-32x^{10}y^{15}$

35. $k^{17}d^{17}$

24. $81n^{36}$

30. $81x^{28}y^8$

36. k^8d^6

A RUBBA DUB DUD

11.3

How Does the King's Son Write?

1a. $9x^6$

b. $20x^5$

c. $24x^5$

d. $-6x^{10}$

2a. $49n^6$

b. $-64n^{24}$

c. $625n^{16}$

d. $64n^{12}$

3a. $16m^{14}d^4$

b. $81m^8d^6$

c. $-m^6d^{15}$

d. $81m^4d^{36}$

4a. $75x^5y^3$

b. $-56x^3y^7$

c. $100x^{18}y^{11}$

d. $-9xy^{19}$

5a. $10p^{11}q^5$

b. $-72p^{16}q^3$

c. $72p^5q^{10}$

d. $-72p^{10}q^8$

6a. $64u^6t^8$

b. $16u^{16}t^{23}$

c. u^4t^6

d. $-u^{10}t^8$

7a. $27a^9b^{22}c^{17}$

b. $a^5b^{12}c^{14}$

c. $-88a^4b^4c^5$

d. $a^{12}b^6c^{10}$

8a. $15k^{17}v^{10}$

b. $40k^{15}v^9$

c. $15k^9v^8$

d. $-k^9v^9$

Why Was the Deck of Cards Always in Trouble?

1a. $4x^2$

1b. $-4x^3$

2a. $2m^3n$

2b. $5m^8n^4$

3a. $\frac{2b^3}{a^3}$

3b. $-\frac{a^2}{2b^5}$

4a. ke

4b. ke^3

5a. $\frac{9c^5}{2d}$

5b. $\frac{d^2}{5c^5}$

6a. $\frac{64x^2}{y^6}$

6b. $-\frac{x^{15}}{8y^6}$

7a. $\frac{4a^2b^6}{c^4}$

7b. $a^3b^9c^6$

8a. $-5v$

8b. $5t^5$

9a. $\frac{1}{w^3h^2}$

9b. $-\frac{1}{w^3}$

10a. $\frac{25q^4}{16p^4}$

10b. $-\frac{27q^{12}}{p^3}$

11a. 16

11b. $\frac{n^2}{5}$

12a. $\frac{a^{3x}}{7^x b^{2x}}$

12b. $\frac{a^{x^2}}{b^{xy}}$

What Did Professor Utterbunk Say When Asked:
Have You Ever Heard of the Planet Saturn?

1. 125
2. $\frac{1}{125}$
3. $\frac{1}{243}$
4. $-\frac{1}{125}$
5. $\frac{1}{144}$
6. $-\frac{1}{144}$
7. 1
8. $-\frac{1}{64}$
9. $-\frac{1}{64}$
10. $\frac{1}{100,000}$
11. $-\frac{1}{100,000}$
12. 1
13. $\frac{1}{75}$
14. $-\frac{1}{75}$
15. $\frac{1}{16}$
16. $-\frac{1}{16}$
17. $7a$
18. $\frac{7a}{b^4}$
19. $\frac{7b^4}{a}$
20. $\frac{ab}{49}$
21. $\frac{2x^3}{y^8}$
22. $\frac{2y^8}{x^3}$
23. $\frac{1}{2x^3y^8}$
24. $3n^2t^5$
25. $\frac{81t^5}{n^2}$
26. $\frac{n^2}{81t^5}$
27. $\frac{64}{5cd^6}$
28. $320d^6$
29. $\frac{c}{320d^6}$
30. $-\frac{5}{64c}$

I'M NOT SURE BUT IT
HAS A FAMILIAR RING

What Did People Say After Two Satellite Dishes Got Married?

A. 512

B. $\frac{1}{512}$

E. -512

L. $-\frac{1}{512}$

I. 625

T. $\frac{1}{625}$

E. $-\frac{1}{625}$

D. 1

T. $\frac{1}{81}$

N. $-\frac{1}{81}$

U. $\frac{5a}{b^3}$

W. $\frac{125}{a^3b}$

D. $\frac{ab^3}{125}$

H. $\frac{16}{b^8}$

S. $\frac{a}{16b^8}$

W. $\frac{k^5}{7n^2}$

L. $\frac{n^2}{49k^5}$

G. $\frac{1}{343n^2}$

D. $\frac{n^2}{98k}$

U. $-\frac{n^2k^5}{98}$

O. 343

E. $\frac{1}{343}$

A. -343

H. $-\frac{1}{343}$

T. 400

E. $\frac{1}{400}$

A. $-\frac{1}{400}$

S. 1

E. $\frac{1}{256}$

I. $-\frac{1}{256}$

T. $\frac{9a}{b^2}$

E. $\frac{81}{a^2b}$

T. $\frac{ab^2}{81}$

W. $\frac{64}{b^{10}}$

R. $\frac{a}{64b^{10}}$

G. $\frac{k^8}{6n^3}$

N. $\frac{n^3}{36k^8}$

C. $\frac{1}{216n^3}$

R. $\frac{n^3}{144k}$

P. $-\frac{n^3k^8}{144}$

THE WEDDING WAS DULL BUT
THE RECEPTION WAS GREAT

What Is Special About a Radioactive Cat?

1. 3.45×10^6
2. 7.7×10^{-4}
3. 7
4. 11
5. -5
6. -11
7. 380,000
8. 0.000038
9. 38,000,000
10. 62,500
11. 0.00625
12. 0.0000000625
13. 7.2×10^4
14. 7.2×10^{12}
15. 7.2×10^{-7}
16. 4.19×10^7
17. 4.19×10^{-3}
18. 4.19×10^{-11}
19. 2.22×10^4
20. 2.22×10^7
21. 5.4×10^{-5}
22. 5.4×10^{-14}

IT HAS EIGHTEEN HALF LIVES

11.8

What Did Mr. Cabinetmaker Say To Mrs. Cabinetmaker?

D. x^3

E. $\frac{1}{x^3}$

F. x^6

E. $12x^5$

D. $\frac{14}{x^2}$

T. $\frac{30}{x^{12}}$

I. $-10x^5$

N. $\frac{8}{x^6}$

E. $-45x^3$

O. -36

W. $\frac{30}{x^4}$

N. $-\frac{64}{x^8}$

R. $18a^5b^5$

O. $-\frac{8b^{11}}{a^2}$

F. $\frac{48b^{13}}{a}$

O. $20a^4b^7$

R. $48b^3$

H. $12a^3$

S. $\frac{12a^3}{b^7}$

U. $-\frac{20b^6}{a}$

O. $-\frac{100}{a^{12}b^3}$

E. $-\frac{49}{a^6b^3}$

M. $\frac{18}{a^3b^{17}}$

R. $-8a^6b^8$

E. 6×10^7

O. 3.6×10^5

V. 7.2×10^{-7}

S. 2.4×10^8

H. 2.5×10^{-6}

R. 2.4×10^{-10}

E. 3.6×10^4

S. 7.2×10^{-19}

U. 1.5×10^8

L. 1.6×10^{13}

WE NEED TO FIND
MORE HOURS FOR
OUR SHELVES

How Did the Absent-Minded Professor Burn His Ear?

E. n^7

N. $49d^2$

N. n^{10}

H. $64d^6$

H. $\frac{1}{n^{10}}$

S. $-64d^6$

A. n^{39}

A. $\frac{1}{64d^6}$

O. $\frac{1}{n^4}$

O. $25d^8$

I. $\frac{1}{n^{16}}$

E. $-64d^7$

E. n^{76}

H. $\frac{1}{81d^{29}}$

I. $x^{10}y^8$

N. $36m^{14}t^8$

N. $1000x^5y^6$

R. $27m^6t^4$

H. $-x^9y^{24}$

W. $16m^4t^6$

E. $x^{12}y^{10}$

G. $-225m^7t^{12}$

G. $81y^2$

N. $\frac{256}{m^4t^4}$

T. $\frac{81y^{12}}{x^2}$

P. $30m^2t^2$

W. $-\frac{125x^8}{y^{13}}$

R. 1

HE WAS IRONING WHEN THE
PHONE RANG