WHY ISN'T A SNOWMAN VERY SMART?

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

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

1
a. $n^2 \cdot n^3$ — n^5
b. $n^7 \cdot n^4$ — n^{11}
c. $2n^5 \cdot 5n$ — $10n^6$
d. $10n^3 \cdot n^8$ — $10n^{11}$

Answers:
C $10n^6$
T n^5
E $10n^{11}$
O $10n^8$
J n^{11}

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

3
a. $\dfrac{v^5}{v^2}$ — v^3
b. $\dfrac{v^9}{v^4}$ — v^5
c. $\dfrac{20v^8}{5v}$ — $4v^7$
d. $\dfrac{44v^7}{11v^6}$ — $4v$

Answers:
H $4v$
N v^5
I v^3
T $4v^7$
E $4v^5$

4
a. $2a^3 \cdot 5a^3$ — $10a^6$
b. $2a^3 + 5a^3$
c. $9a^8 \cdot 4a^8$ — $36a^{16}$
d. $9a^8 + 4a^8$

Answers:
L $10a^6$
N $36a^{16}$
W $13a^{16}$
D $7a^3$
R $13a^8$

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}

6
a. $\dfrac{m^8}{m^3}$ — m^5
b. $\dfrac{m^3}{m^8}$ — $\dfrac{1}{m^5}$
c. $\dfrac{40m^{11}}{8m^4}$ — $5m^7$
d. $\dfrac{8m^4}{40m^{11}}$ — $\dfrac{1}{5m^7}$

Answers:
G $\dfrac{1}{m^5}$
H $5m^{15}$
T m^5
B $\dfrac{1}{5m^7}$
M $5m^7$

7
a. $t^6 \cdot t^5$ — t^{11}
b. $t^6 + t^5$
c. $3t \cdot 8t^3$ — $24t^4$
d. $3t + 8t^3$

Answers:
K $24t^4$
L t^{11}
N $3t + 8t^3$
B $11t^8$
C $t^6 + t^5$

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 $64k^{30}$

9
a. $\dfrac{49x^7}{7x^2}$ — $7x^5$
b. $\dfrac{49x^2}{7x^7}$ — $\dfrac{7}{x^5}$
c. $\dfrac{7x^7}{49x^2}$ — $\dfrac{x^5}{7}$
d. $\dfrac{7x^2}{49x^7}$ — $\dfrac{1}{7x^5}$

Answers:
M $\dfrac{x^5}{7}$
U $\dfrac{1}{7x^5}$
R $7x$
Y $\dfrac{7}{x^5}$
L $7x^5$

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 $-w^{12}$