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.

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

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}

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. $\frac{v^5}{v^2}$

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) $4v^5$

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) $13a^8$

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. $\frac{m^8}{m^3}$

b. $\frac{m^3}{m^8}$

c. $\frac{40m^{11}}{8m^4}$

d. $\frac{8m^4}{40m^{11}}$

Answers
- (G) $\frac{1}{m^5}$
- (B) $\frac{1}{5m^7}$
- (H) $5m^{15}$
- (T) m^5
- (M) $5m^7$

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) $t^6 + t^5$

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. $\frac{49x^7}{7x^2}$

b. $\frac{49x^2}{7x^7}$

c. $\frac{7x^7}{49x^2}$

d. $\frac{7x^2}{49x^7}$

Answers
- (M) $\frac{x^5}{7}$
- (Y) $\frac{7}{x^5}$
- (U) $\frac{1}{7x^5}$
- (R) $7x$
- (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) $-w^{12}$