

Name:

Date:

Multiplying Monomials – Activity Worksheet

Multiply each expression given below and match the answer from the letter code box. The riddle at the bottom has the question numbers. Fill it with the corresponding letter codes.

① $(4xy).(7x^2y^2) =$

② $(z^3x^4).(5x^3z^5) =$

③ $(3p^4q^3).(2pq) =$

④ $(r^2s).(r^4s^5) =$

⑤ $(uv).(3u) =$

⑥ $(d^3).(d^6) =$

⑦ $(-a^5bc^2).(a^2b^2) =$

⑧ $(pqr).(srq) =$

⑨ $(2m^2)^2.(4mn^2) =$

⑩ $(km^2).(k^2m) =$

⑪ $(-4n^5).(2n^2) =$

⑫ $(14g^2h).(4g^4h^3) =$

⑬ $(c^4).(c^7) =$

⑭ $(4st).(2s^2t)^2 =$

⑮ $(a^{11}b).(ab^{11}) =$

⑯ $(7k^8).(4k^4) =$

⑰ $(2p)^2.(3p^2)^3 =$

⑱ $(2m^7n^{11}).(2m^2n^3) =$

⑲ $(xy^3).(x^3y) =$

⑳ $(4w^4).(-3w^2) =$

㉑ $(b^2).(b^4) =$

Letter Code

Ⓐ $a^{12}b^{12}$

Ⓒ pq^2r^2s

Ⓔ c^{11}

Ⓓ k^3m^3

Ⓜ $28x^3y^3$

Ⓔ $16m^5n^2$

Ⓐ $-a^7b^3c^2$

Ⓓ $4m^9n^{14}$

Ⓓ $28k^{12}$

Ⓜ $108p^8$

Ⓒ $-12w^6$

Ⓓ $-8n^7$

Ⓓ $6p^5q^4$

Ⓜ $16s^5t^3$

Ⓓ d^9

Ⓓ r^6s^6

Ⓒ $3u^2v$

Ⓓ $5x^7z^8$

Ⓜ $56g^6h^4$

Ⓔ x^4y^4

Ⓓ b^6

Riddle

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
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Multiplying Monomials – Activity Worksheet

Answers

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|--------------------------------------|----------------------------------|---|
| ① $(4xy).(7x^2y^2) = 28x^3y^3$ | ② $(z^3x^4).(5x^3z^5) = 5x^7z^8$ | ③ $(3p^4q^3).(2pq) = 6p^5q^4$ |
| ④ $(r^2s).(r^4s^5) = r^6s^6$ | ⑤ $(uv).(3u) = 3u^2v$ | ⑥ $(d^3).(d^6) = d^9$ |
| ⑦ $(-a^5bc^2).(a^2b^2) = -a^7b^3c^2$ | ⑧ $(pqr).(srq) = pq^2r^2s$ | ⑨ $(2m^2)^2.(4mn^2) = 16m^5n^2$ |
| ⑩ $(km^2).(k^2m) = k^3m^3$ | ⑪ $(-4n^5).(2n^2) = -8n^7$ | ⑫ $(14g^2h).(4g^4h^3) = 56g^6h^4$ |
| ⑬ $(c^4).(c^7) = c^{11}$ | ⑭ $(4st).(2s^2t)^2 = 16s^5t^3$ | ⑮ $(a^{11}b).(ab^{11}) = a^{12}b^{12}$ |
| ⑯ $(7k^8).(4k^4) = 28k^{12}$ | ⑰ $(2p)^2.(3p^2)^3 = 108p^8$ | ⑱ $(2m^7n^{11}).(2m^2n^3) = 4m^9n^{14}$ |
| ⑲ $(xy^3).(x^3y) = x^4y^4$ | ⑳ $(4w^4).(-3w^2) = -12w^6$ | ㉑ $(b^2).(b^4) = b^6$ |

Letter Code

- | | | | | |
|------------------|--------------|----------------|----------------|--------------|
| Ⓐ $a^{12}b^{12}$ | Ⓒ pq^2r^2s | Ⓔ c^{11} | Ⓓ k^3m^3 | |
| Ⓜ $28x^3y^3$ | Ⓔ $16m^5n^2$ | Ⓐ $-a^7b^3c^2$ | Ⓣ $4m^9n^{14}$ | Ⓣ $28k^{12}$ |
| Ⓜ $108p^8$ | Ⓢ $-12w^6$ | Ⓣ $-8n^7$ | Ⓛ $6p^5q^4$ | |
| Ⓜ $16s^5t^3$ | Ⓝ d^9 | Ⓛ r^6s^6 | Ⓞ $3u^2v$ | Ⓨ $5x^7z^8$ |
| Ⓜ $56g^6h^4$ | Ⓔ x^4y^4 | Ⓣ b^6 | | |

Riddle

<u>M</u>	<u>Y</u>	<u>L</u>	<u>I</u>	<u>O</u>	<u>N</u>	<u>A</u>	<u>C</u>	<u>E</u>	<u>D</u>	<u>T</u>	<u>H</u>	<u>E</u>	<u>M</u>	<u>A</u>	<u>T</u>	<u>H</u>	<u>T</u>	<u>E</u>	<u>S</u>	<u>T</u>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21