

Name : \_\_\_\_\_

## Multiplying Polynomials

Multi-variable: S2

Multiply the following.

1)  $-2a^5bc(-5b - 1 - 9ac^2 - 4b^3c)$

2)  $\frac{1}{4}s^2t^3(-32s^3t^2 + 8st + \frac{6}{7}s^2t)$

3)  $-7uv(2v^7 + uv + t^2)$

$+ 4p^3q^4 - 6pqr^7)$

5)  $5m^7n(\frac{3}{5}mn^6 - 2r^2)$

$c^3d + d - 3c^5d^6)$

7)  $\frac{9}{10}g^2(-\frac{2}{3}h^6 + \frac{10}{21}gh - \frac{10}{9} + \frac{5}{9}h)$

8)  $-3(-14xy^4 - w^3x^2 + 3 + 4w^5 - w^7x^4)$

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## Answer key

### Multiplying Polynomials

Multi-variable: S2

Multiply the following.

1)  $-2a^5bc(-5b - 1 - 9ac^2 - 4b^3c)$

2)  $\frac{1}{4}s^2t^3(-32s^3t^2 + 8st + \frac{6}{7}s^2t)$

$8a^5b^4c^2 + 18a^6bc^3 + 10a^5b^2c + 2a^5bc$

$-8s^5t^5 + \frac{3}{4}s^4t^4 + 2s^3t^4$

3)  $-7uv(2v^7 + uv + t^2)$

# PREVIEW

$+ 4p^3q^4 - 6pqr^7$

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$-14uv^8 - 7u^5v - 7t^2uv$

$p^4q^9r^6 + 26p^3q^6r^6$

5)  $5m^7n(\frac{3}{5}mn^6 - 2r^2)$

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$c^3d + d - 3c^5d^6$

$3m^8n^7 - 5m^{13}n - 2r^2m^7n$

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$5c^2d^6 + c^4d^3 + cd^3$

7)  $\frac{9}{10}g^2(-\frac{2}{3}h^6 + \frac{10}{21}gh - \frac{10}{9} + \frac{5}{9}h)$

8)  $-3(-14xy^4 - w^3x^2 + 3 + 4w^5 - w^7x^4)$

$-\frac{3}{5}g^2h^6 + \frac{3}{7}g^3h + \frac{1}{2}g^2h - g^2$

$3w^7x^4 - 12w^5 + 3w^3x^2 + 42xy^4 - 9$