

Multiplying Binomials - Box Method

Find the product using box method

① $(5x + 2y)(5x - 2)$

② $(4x^2 - y)(2x^2y^2 + xy)$

③ $(-3a - 12)(5a - 3a^5)$

④ $(3g - 10)(4g - 3g^2)$

⑤ $(2s + 7)(10s - 5)$

⑥ $(5pqr + 20p)(pqr^2 - 6)$

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Answers

① $(5x + 2y)(5x - 2)$

	$5x$	-2
$5x$	$25x^2$	$-10x$
$2y$	$10xy$	$-4y$

$25x^2 + 10xy - 10x - 4y$

② $(4x^2 - y)(2x^2y^2 + xy)$

	$2x^2y^2$	xy
$4x^2$	$8x^4y^2$	$4x^3y$
$-y$	$-2x^2y^3$	$-xy^2$

$8x^4y^2 + 4x^3y - 2x^2y^3 - xy^2$

③ $(-3a - 12)(5a - 3a^5)$

	$5a$	$-3a^5$
$-3a$	$-15a^2$	$9a^6$
-12	$-60a$	$36a^5$

$9a^6 + 36a^5 - 15a^2 - 60a$

④ $(3g - 10)(4g - 3g^2)$

	$4g$	$-3g^2$
$3g$	$12g^2$	$-9g^3$
-10	$-40g$	$30g^2$

$-9g^3 + 42g^2 - 40g$

⑤ $(2s + 7)(10s - 5)$

	$10s$	-5
$2s$	$20s^2$	$-10s$
7	$70s$	-35

$20s^2 + 60s - 35$

⑥ $(5pqr + 20p)(pqr^2 - 6)$

	pqr^2	-6
$5pqr$	$5p^2q^2r^3$	$-30pqr$
$20p$	$20p^2qr^2$	$-120p$

$5p^2q^2r^3 + 20p^2qr^2 - 30pqr - 120p$
