

# Fill in the Blanks

## Simplifying Expressions with Powers

Question	Write Each Term Separately to the Power	Simplify Each Term	Answer
$(3a)^2$	$3^2 \times a^2$	$9 \times a^2$	$9a^2$
$(6b)^2$	$6^2 \times b^2$	$36 \times b^2$	$36b^2$
$(2b)^3$	$2^3 \times b^3$	$8 \times b^3$	$8b^3$
$(ab)^4$	$a^4 \times b^4$	$a^4 \times b^4$	$a^4b^4$
$(4a^2)^3$	$4^3 \times (a^2)^3$	$64 \times a^6$	$64a^6$
$(2b^3)^4$	$2^4 \times (b^3)^4$	$16 \times b^{12}$	$16b^{12}$
$(2ab)^4$	$2^4 \times a^4 \times b^4$	$16 \times a^4 \times b^4$	$16a^4b^4$
$(5ab^2)^2$	$5^2 \times a^2 \times (b^2)^2$	$25 \times a^2 \times b^4$	$25a^2b^4$
$(a^2b^3)^3$	$(a^2)^3 \times (b^3)^3$	$a^6 \times b^9$	$a^6b^9$
$(3a^2b)^3$	$3^3 \times (a^2)^3 \times b^3$	$27 \times a^6 \times b^3$	$27a^6b^3$
$(4a^3b^4)^2$	$4^2 \times (a^3)^2 \times (b^4)^2$	$16 \times a^6 \times b^8$	$16a^6b^8$
$(5a^4b)^3$	$5^3 \times (a^4)^3 \times b^3$	$125 \times a^{12} \times b^3$	$125a^{12}b^3$
$(7a^2b^5)^2$	$7^2 \times (a^2)^2 \times (b^5)^2$	$49 \times a^4 \times b^{10}$	$49a^4b^{10}$
$(a^2b^4c)^3$	$(a^2)^3 \times (b^4)^3 \times c^3$	$a^6 \times b^{12} \times c^3$	$a^6b^{12}c^3$
$(3a^4b^3)^4$	$3^4 \times (a^4)^4 \times (b^3)^4$	$81 \times a^{16} \times b^{12}$	$81a^{16}b^{12}$
$(2a^3b^2c^4)^5$	$2^5 \times (a^3)^5 \times (b^2)^5 \times (c^4)^5$	$32 \times a^{15} \times b^{10} \times c^{20}$	$32a^{15}b^{10}c^{20}$