Fill In The Blanks…

**Expanding Harder Brackets**

|  |  |  |  |
| --- | --- | --- | --- |
| **Double Brackets Form** | **Grid** | **Expanded Form** | **Simplified Expanded Form** |
| $$x(x^{2}+2x+3)$$ | $$×$$ | $$x^{2}$$ | $$+2x$$ | $$+3$$ | $$x^{3}+2x^{2}+3x$$ | $$x^{3}+2x^{2}+3x$$ |
| $$x$$ | $$x^{3}$$ | $$+2x^{2}$$ | $$+3x$$ |
| $$2x(x^{2}-x+4)$$ | $$×$$ | $$x^{2}$$ | $$-x$$ | $$+4$$ |  |  |
| $$2x$$ | $$2x^{3}$$ |  |  |
| $$(x+1)(x^{2}+3x+2)$$ | $$×$$ | $$x^{2}$$ | $$+3x$$ | $$+2$$ | $$x^{3}+3x^{2}+2x+x^{2}+ $$ |  |
| $$x$$ | $$x^{3}$$ | $$+3x^{2}$$ | $$+2x$$ |
| $$+1$$ | $$+x^{2}$$ |  |  |
| $$(x+2)(x^{2}+4x-3)$$ | $$×$$ | $$x^{2}$$ | $$+4x$$ | $$-3$$ |  |  |
| $$x$$ | $$x^{3}$$ | $$+4x^{2}$$ | $$-3x$$ |
| $$+2$$ |  |  | $$-6$$ |
| $$(x-4)(x^{2}-x+5)$$ | $$×$$ | $$x^{2}$$ | $$-x$$ | $$+5$$ |  |  |
| $$x$$ |  |  |  |
| $$-4$$ | $$-4x^{2}$$ | $$+4x$$ |  |
| $$(x+5)(2x^{2}+x-1)$$ | $$×$$ | $$2x^{2}$$ | $$+x$$ | $$-1$$ |  |  |
| $$x$$ |  |  |  |
| $$+5$$ |  |  |  |
| $$(x-3)(3x^{2}+2x-1)$$ | $$×$$ | $$3x^{2}$$ | $$+2x$$ | $$-1$$ |  |  |
| $$x$$ |  |  |  |
| $$-3$$ |  |  |  |
| $$(2x+1)(x^{2}-5x+2)$$ | $$×$$ |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| $$(3x-2)(6-3x-x^{2})$$ | $$×$$ |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| $$(7-2x)(6-x-3x^{2})$$ | $$×$$ |  |  |  |  |  |
|  |  |  |  |
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