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| --- | --- |
| 1. $ x^{2}+2x+1$ | a. $(x+1)(x+1)$ |
| 2. $ 3x^{2}-6x-9$ | b. $7(x-2)(x+2)$ |
| 3. $ x^{2}-9x+20$ | c. $6x(x-3)(x+1)$ |
| 4. $3x^{2}+15x+12$ | d. $2(x-4)(x-5)$ |
| 5. $ 2x^{2}-4x-6$ | e. $(x-3)(x+3)$ |
| 6. $x^{3}-5x^{2}-24x$ | f. $(x-5)(x+7)$ |
| 7. $ 5x^{2}+10x+5$ | g. $x(x-8)(x+3)$ |
| 8. $2x^{2}-18x+40$ | h. $2(x-3)(x+1)$ |
| 9. $6x^{3}-12x^{2}-18x$ | i. $3(x+4)(x+1)$ |
| 10. $ x^{2}-12x+35$ | j. $3(x-3)(x+1)$ |
| 11. $ 9x^{2}-36x+27$ | k. $(x-7)(x-5)$ |
| 12. $ x^{2}+2x-35$ | l. $(x-5)(x-4)$ |
| 13.$ x^{2}-9$ | m. $9(x-3)(x+1)$ |
| 14.$ x^{3}+25x$ | n. $5(x+1)(x+1)$ |
| 15. $ 7x^{2}-28$ | o. $x(x-5)(x+5)$ |

**Directions:** Match each polynomial to its factors. Show your work for each problem. Numbers matched with letters will result in a zero. Please staple your work to the back of this sheet

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| 1. | 2. | 3. | 4. | 5. |
| 6. | 7. | 8. | 9. | 10. |
| 11. | 12. | 13. | 14. | 15. |