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| Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Factoring out GCF from Polynomials |
| **1. What is the greatest common factor of:**12 and 18 | **2. What is the greatest common factor of:**27 and 63x | **3. What is the greatest common factor of:**16x2 and 24x |
| **4. What is the greatest common factor of:**10 and 35 and 15 | **5. What is the greatest common factor of:**8x2 and 30x3 and 16x | **6. What is the greatest common factor of:**x6 and 2x5 and 5x2 |
| **Factor the greatest common factor out of each expression.****If there is no common factor, write prime.** |
| **7.** **Factor the polynomial:**45x2 – 25  | **8.** **Factor the polynomial:**6x + 3 | **9.** **Factor the polynomial:**24x2 – 8x  |
| **10.** **Factor the polynomial:**-2x2 + 8x  | **11.** **Factor the polynomial:**-4x + 10 | **12.** **Factor the polynomial:**1 + 2x2 |
| **13.** **Factor the polynomial:**12x2 – 9x + 15 | **14.** **Factor the polynomial:**-3x3 – 12x2 + 15x | **15.** **Factor the polynomial:**9x2 – 4x + 12 |
| **16.** **Factor the polynomial:**2x4 – 3x2 + 5x | **17.** **Factor the polynomial:**17x2 + 34x + 51 | **18.** **Factor the polynomial:**-20x6 – 40x4 + 20x2 |
| **19.** **Factor the polynomial:**8x3y2 + 4x2 | **20.** **Factor the polynomial:**-10xy4 – 15x2y2 | **21.** **Factor the polynomial:**4x2y3 + 4x2y2 – 8x3y4 + 16x3y2 |