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| 1. Solve: y2 – 8y + 16 = 64 | 1. Solve: x2 + 12x + 36 = 25 |
| 1. Factor: 15b2 – 24bc | 1. Factor: 2x3 + 8x |
| 1. Factor: 36x8 – 60x4 + 25 | 1. Factor: 45q3 – 20q |
| 1. Factor: 16p5 – 81p | 1. Solve: 2m2 = 32m |
| 1. Factor: 36x2 – 100y2 | 1. Factor: j2 – 9jk – 10k2 |
| 1. Simplify:   (k3 – 2k2 + 4k + 6) – (-4k + k2 – 3) | 1. Simplify:   4x2(x – 7) – 5x(x2– 2x – 2) + 3x(4x – 2) |
| 1. Simplify: (2p + 4q)2 | 1. Simplify:   (3x – 2y2)(3x + 2y2) |
| 1. Simplify:   (3y2 + 2y + 2)(3y2 – 4y – 5) | 1. Let x be an even integer. What is the simplified product of the next two consecutive even integers? |
| 1. Solve:   18a2 + 10a = -11a + 4 | 1. Factor: 3a2 + 30a + 63 |
| 1. Factor: 12x3 + 34x2 – 28x | 1. Solve: 6b2 – 5b = 4 |
| 1. Factor: 10x2 + 21xy – 10y2 | 1. Factor: 24c3 – 84c2 + 10c – 35 |
| 1. Factor: 12x3 + 16x2 – 3x – 4 | 1. Factor: 12e4 + 18e3 + 36e2 + 54e |
| 1. Simplify: 3x(3x2 – 2x)(6x – 4) | 1. Simplify: (2y2 + 4y – 5)(3y – 4) |
| 1. Factor: 32x5 – 162x | 1. The length of a Charlotte, NC conservatory garden is 20 yards greater than its width. The area is 300 square yards. What are the dimensions of the garden? |
| The perimeter of a quadrilateral is 12x2 – 2x + 15 cm. Three sides have the following lengths: 2x2 – 7 cm, 3x + 4 cm, 3x2 – 2x – 11 cm. What is the length of the fourth side? | |