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| **Square of a Sum** |  |
| **Square of a Difference** |  |
| **Product of a Sum and Difference** |  |
| **Find each product. Try to use your shortcut rules from above instead of FOILing.** |
| **Square of a Sum** | 1) $\left(3p+4\right)^{2}$ | 2) $\left(2h+3\right)^{2}$ | 3) $\left(m+5\right)^{2}$ |
| 4) $\left(a+3\right)^{2}$ | 5) $\left(8y+4\right)^{2}$ | 6) $(3y+2m)(3y+2m)$ |
| 7) $\left(x^{2}+1\right)^{2}$ | 8) $\left(2p+4r\right)^{2}$ | 9) $\left(x+5y\right)^{2}$ |
| **Square of a Difference** | 10) $\left(x-6\right)^{2}$ | 11) $\left(4x-5\right)^{2}$ | 12) $\left(2x-1\right)^{2}$ |
| 13) $\left(3-p\right)^{2}$ | 14) $\left(x-5y\right)^{2}$ | 15) $\left(3a-2b\right)^{2}$ |
| 16) $(m-2)(m-2)$ | 17) $\left(2p+4r\right)^{2}$ | 18) $\left(2h^{2}-k^{2}\right)^{2}$ |
| **Product of a Sum and Difference** | 19) $(x-4)(x+4)$ | 20) $(p+2)(p-2)$ | 21) $(4x-5)(4x+5)$ |
| 22) $(h-7)(h+7)$ | 23) $(2d-3)(2d+3)$ | 24) $(x^{2}+1)(x^{2}-1)$ |
| 25) $(8+4x)(8-4x)$ | 26) $(h^{2}-k^{2})(h^{2}+k^{2})$ | 27) $\left(3x-2y^{2}\right)\left(3x+2y^{2}\right)$ |

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| **Square of a Sum** |  |
| **Square of a Difference** |  |
| **Product of a Sum and Difference** |  |
| **Mixed Practice!** | 28) $\left(n+3\right)^{2}$ | 29) $(x+4)(x+4)$ | 30) $\left(y-7\right)^{2}$ |
| 31) $(t-3)(t-3)$ | 32) $(b+1)(b-1)$ | 33) $(z+3)(z-3)$ |
| 34) $\left(3g+2m\right)^{2}$ | 35) $\left(7m^{2}-2\right)^{2}$ | 36) $\left(3b+7\right)(3b-7)$ |
| 37) $\left(n^{2}-2r^{2}\right)^{2}$ | 38) $(3y-3g)(3y+3g)$ | 39) $\left(2k+m^{2}\right)^{2}$ |
| 40) Leo wants to make a graph so that it is 3 inches longer on every side. Use a special product to find the area of the new graph. |
| 41) A basketball court has a width of 3x – 2 feet and a length of 3x + 2 feet. Use a special product to find the area of the basketball court.  |