

Factoring Cut-outs – Cut out each puzzle piece and reassemble so that the expressions and their factored forms match up.

|  |  |   |  |
|--|--|---|--|
| $x^2+4x-21$<br>$x^2+6x+9$<br>$(x+4)(x-1)$<br>$(x+2)(x+10)$ | $x^2+3x-4$<br>$x^2$<br>$(x+5)(x+2)$<br>$x^2+9x+20$ | $x^2-64$<br>$x^2-4$<br>$(x-2)(x+2)$<br>$x^2+20x+100$          | $x^2+8x+7$<br>$x^2+7x+10$<br>$x^2+6x$<br>$(x+5)(x+4)$      |
| $(x)(3x)$<br>$x^2$<br>$(x+4)(x-1)$<br>$(x+2)(x+10)$        | $x^2$<br>$x^2-4$<br>$(x+5)(x+2)$<br>$x^2+9x+20$    | $(x-2)(x+2)$<br>$x^2+7x+10$<br>$(x+10)(x+2)$<br>$x^2+20x+100$ | $(x)(x)$<br>$x^2+6x$<br>$(x-2)(x+4)$<br>$(x+5)(x+4)$       |
| $x^2-7x-18$<br>$(x+10)(x+2)$                               | $(x+3)^2$<br>$x^2+10x+25$<br>$(x+4)(x-1)$          | $(3x)(x)$<br>$x^2-1$<br>$(x+4)(x+3)$                          | $(5x)(3x)$<br>$x^2+4x+4$<br>$x^2+3x-4$<br>$(x+7)(x-3)$     |
| $x^2+2x-8$<br>$x^2-5x$<br>$(x+10)^2$                       | $x^2+7x+10$<br>$3x+6$<br>$x(x+6)$<br>$(x-10)(x-4)$ | $x^2+12x+20$<br>$x^2+6x$<br>$(x+2)^2$<br>$x^2+12x+20$         | $x^2-4x-5$<br>$(x+5)(x+2)$<br>$(x+6)(x+10)$<br>$x^2+9x+20$ |
| $x^2-14x+40$<br>$15x^2$<br>$x^2+12x+20$                    | $x^2+3x-4$<br>$3x^2$<br>$x(x+1)$<br>$(x-8)(x+8)$   | $(x+9)(x-6)$<br>$x^2+x$<br>$(x+1)(x-5)$                       | $x^2+20x+100$<br>$3x+6$<br>$(x+5)^2$<br>$(x+7)(x+1)$       |