

Name \_\_\_\_\_ Date \_\_\_\_\_

Patterning and Algebra  
Unit 2 Line Master 4a

## Connect Four Game Cards

### Simplifying Expressions

$7(a + 2) + 5a - 1$	$5b + 3 - b + 7$
$2(3c) + 4(5c)$	$5(6d) + 5d$
$2(e + 4) + 3(e + 3)$	$f + 11 + 4(f + 1)$
$9g + 2g - g + 6$	$3h + 2 + 4h - 1$
$7(j + 3) + j - 3$	$k + 14 + 10(k + 1)$
$3m + 2n + 6m + n$	$4(5p) + 9 + 2p + 1$
$7(3 + r) + 2(r + 3)$	$5s + 7 - 4 + 2s + 3$
$2t + 6 + t - 2 + t$	$4(3u) + 5v + 3u + 2(8v)$

**Connect Four Game Cards****Solving Equations**

$a - 7 = 15$	$3b = 39$
$2c + 5 = 13$	$4d - 9 = 31$
$5e + 2 + 3e + 1 = 40 + 3$	$3(2f + 1) + 2(f + 3) = 5^2$
$2(7g) + 6(2g) = 100 - 22$	$6^2 = 2h + 5 + 4h - 5$
$7(j + 1) + 3(j + 4) = 25 + 34$	$11k + 16 + 2k - 9 = 8 \times 9$
$5m + 9 + 2(m + 1) - 7 = 8 \times 11$	$3(6n) + 3(2n) = 12 \times 14$
$p + 2(p + 3) - 5 = 70 - 18$	$6q + 3 = 3q + 4 \times 6$
$8(r + 1) + 3(2r + 1) = 13 \times 3$	$5s + 2s = 10 + 4 \times 8$

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Patterning and Algebra  
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## Connect Four Game Cards

### Skill-Testing Questions

$2 \times (9 - 4) + 4^2 - 3$	$35 \div (6 - 1) \times 2^3 + 1$
$5 + 3 \times 2 + 3^2 \times (13 - 9)$	$2^2 \times (12 - 7) \div (7 - 5) \times 3$
$5^2 \times (6 - 2) \div 10$	$(3 + 1) \times 2 + 2^2$

**Connect Four Game Cards****Simplifying Expressions: Answers**

$7(a + 2) + 5a - 1 = 12a + 13$	$5b + 3 - b + 7 = 4b + 10$
$2(3c) + 4(5c) = 26c$	$5(6d) + 5d = 35d$
$2(e + 4) + 3(e + 3) = 5e + 17$	$f + 11 + 4(f + 1) = 5f + 15$
$9g + 2g - g + 6 = 10g + 6$	$3h + 2 + 4h - 1 = 7h + 1$
$7(j + 3) + j - 3 = 8j + 18$	$k + 14 + 10(k + 1) = 11k + 24$
$3m + 2n + 6m + n = 9m + 3n$	$4(5p) + 9 + 2p + 1 = 22p + 10$
$7(3 + r) + 2(r + 3) = 9r + 27$	$5s + 7 - 4 + 2s + 3 = 7s + 6$
$2t + 6 + t - 2 + t = 4t + 4$	$4(3u) + 5v + 3u + 2(8v)$ $= 15u + 21v$

**Connect Four Game Cards****Solving Equations: Answers**

$a - 7 = 15$ $a = 22$	$3b = 39$ $b = 13$
$2c + 5 = 13$ $c = 4$	$4d - 9 = 31$ $d = 10$
$5e + 2 + 3e + 1 = 40 + 3$ $e = 5$	$3(2f + 1) + 2(f + 3) = 5^2$ $f = 2$
$2(7g) + 6(2g) = 100 - 22$ $g = 3$	$6^2 = 2h + 5 + 4h - 5$ $h = 6$
$7(j + 1) + 3(j + 4) = 25 + 34$ $j = 4$	$11k + 16 + 2k - 9 = 8 \times 9$ $k = 5$
$5m + 9 + 2(m + 1) - 7 = 8 \times 11$ $m = 12$	$3(6n) + 3(2n) = 12 \times 14$ $n = 7$
$p + 2(p + 3) - 5 = 70 - 18$ $p = 17$	$6q + 3 = 3q + 4 \times 6$ $q = 7$
$8(r + 1) + 3(2r + 1) = 13 \times 3$ $r = 2$	$5s + 2s = 10 + 4 \times 8$ $s = 6$

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Patterning and Algebra  
Unit 2 Line Master 4f

## Connect Four Game Cards

### Skill-Testing Questions: Answers

$2 \times (9 - 4) + 4^2 - 3 = 23$	$35 \div (6 - 1) \times 2^3 + 1 = 57$
$5 + 3 \times 2 + 3^2 \times (13 - 9) = 47$	$2^2 \times (12 - 7) \div (7 - 5) \times 3 = 30$
$5^2 \times (6 - 2) \div 10 = 10$	$(3 + 1) \times 2 + 2^2 = 12$