Name:_____ Hour:_____

Variables and Patterns INV 4 STUDY GUIDE

Simplify the expressions by combining like terms. IXL Y 15,16,17

30n + 6 - 20n + 2

3n + 1 - 2n + n

3n + 7n - 3

(r +5)5

Circle the coefficients in each expression. IXL Y7

3x + 11 5n - 3n + 6 8n + 10 - 2n + 13n - 2

Circle the third term in each expression. IXL Y7

x + 12 - 5b 6n - 7r + 100 n + 99 - 3r + 16t - 33

Which option (a,b,c, or d) equivalent expressions for the area of the figure? IXL Y11,12

a.) 10(15 + 3) and (10 x 15) + (10 x 3) b.) 3(15 + 10) and 3 + 15 + 3 + 10

c.) 15(10 + 3) and (15 x 10) + (15 x 3) d.) 10(10 +15) and 10 + 10 + 10 + 15

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Solve each of the following. Select which is equivalent to (5 x 4) + (5 x n)
IXL Y11,12

a.) n(5 + 4) b.) 5(4 +n)

c.) 4(n+5) d.) n(4 + 5)

Simplify 3(n +5) _____
Select ALL that are equivalent.**IXL Y16**

- 3(n + 4) + 3
- 3n + 10
- 3n + 5
- 3n + 5 + n + 5

What is the value of $4n + a^2 - 2t$, when n=2, a=1, and t = 3?
SHOW ALL WORK IXL Y5

Name:_____ Hour:_____

Yellow Jacket Challenge Costs of Operation

Greenville Yellow Jacket Challenge	***Operating Costs***
After Race Snacks & Water	$1.00 per person
Race T-Shirt	$11 per person
Timers, tables, advertisement	$200

Circle the equation(s) that can represent the total cost **C** for number of people ***n***.

C = 11n + 1n + 200
C = 1 + 11n + 200
C = 1n + 11 + 200n
C = 12n + 200

Solve for the unknown in the following equations: IXL 6, 9

34 = x - 2 2X - 10 = 22 $\frac{x}{5}$ = 15