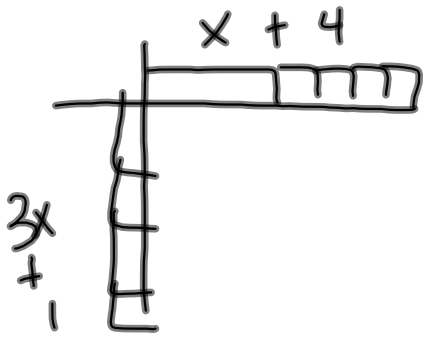
Sample Test for Jan 12|13

1. C
2. B



3. D
4. A

$25 + 40h + 16h^2$ (decomposition)

~~D~~) $(5-4h)(5+4h)$ $-16h^2$

~~B~~) $(5+8h)(5+8h)$ $64h^2$

C) $(5+2h)(5+8h)$

$25 + 40h + 10h + 16h^2$ ($50h$)

A) $(5+4h)(5+4h)$

$25 + 20h + 20h + 16h^2$

$25 + 40h + 16h^2$

5. $(x+1)(3x-2)$ (D)

$3x^2 - 2x + 3x - 2$

$3x^2 + x - 2$

6. $6x^2 - 13x - 5$

Decomposition

add -13
mult -30
-15 & 2

30
1 30
2 15
3 10
5 6

$(6x^2 - 15x + 2x - 5)$

$3x(2x-5) + 1(2x-5)$

$(3x+1)(2x-5)$ B

7. $n^2 + 9n - 36$ (add/mult)

add 9
mult -36
-3 & 12

36
1 36
2 18
3 12
4 9
6 6

$(x-3)(x+12)$ C

8. $12a^2 + 18a$ (GCF)

$6a(2a+3)$ C

9. $A = lw$

$2x^2 + 9x - 5 = (x+5)(2x-1)$ (A)

10. $x^2 - 8x - 20$ (add/mult)

add -8
mult -20
2 & -10

$(x+2)(x-10)$ D

11a) GCF
$8m^2(3m-2m^2+4)$

b) GCF
$7pq^3(2p^3q-5)$

12. (multiply)
$8x^4+22x^3-128x^2+187-91$

13. $6x^2+x+3$

14a) add/multiply
$(x+7)(x-6)$

b) Decomposition
$(2x-1)(3x+4)$

c) difference of squares
$(x-6)(x+6)$

d) add/mult
$(x-9)(x-3)$

e) GCF $2(x^2-4)$
difference of squares $2(x+2)(x-2)$

f) GCF: $3(5x^2+11x+2)$
Decomposition

$3(5x+1)(x+2)$