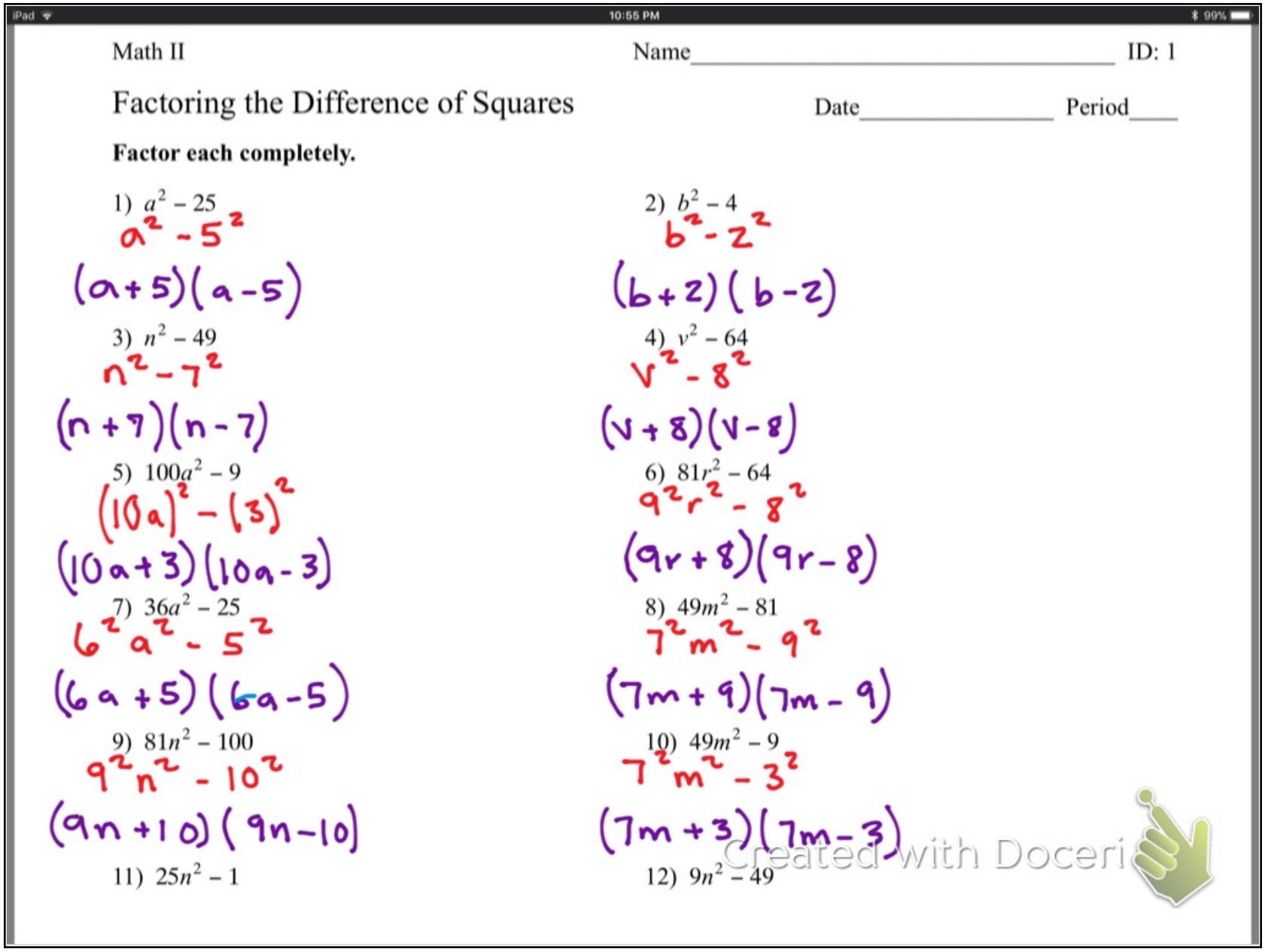


Math II Name_____ ID: 1

Factoring the Difference of Squares

Date_____ Period____

Factor each completely.

1) $a^2 - 25$

$a^2 - 5^2$

$(a+5)(a-5)$

2) $b^2 - 4$

$b^2 - 2^2$

$(b+2)(b-2)$

3) $n^2 - 49$

$n^2 - 7^2$

$(n+7)(n-7)$

4) $v^2 - 64$

$v^2 - 8^2$

$(v+8)(v-8)$

5) $100a^2 - 9$

$(10a)^2 - (3)^2$

$(10a+3)(10a-3)$

6) $81r^2 - 64$

$9^2r^2 - 8^2$

$(9r+8)(9r-8)$

7) $36a^2 - 25$

$6^2a^2 - 5^2$

$(6a+5)(6a-5)$

8) $49m^2 - 81$

$7^2m^2 - 9^2$

$(7m+9)(7m-9)$

9) $81n^2 - 100$

$9^2n^2 - 10^2$

$(9n+10)(9n-10)$

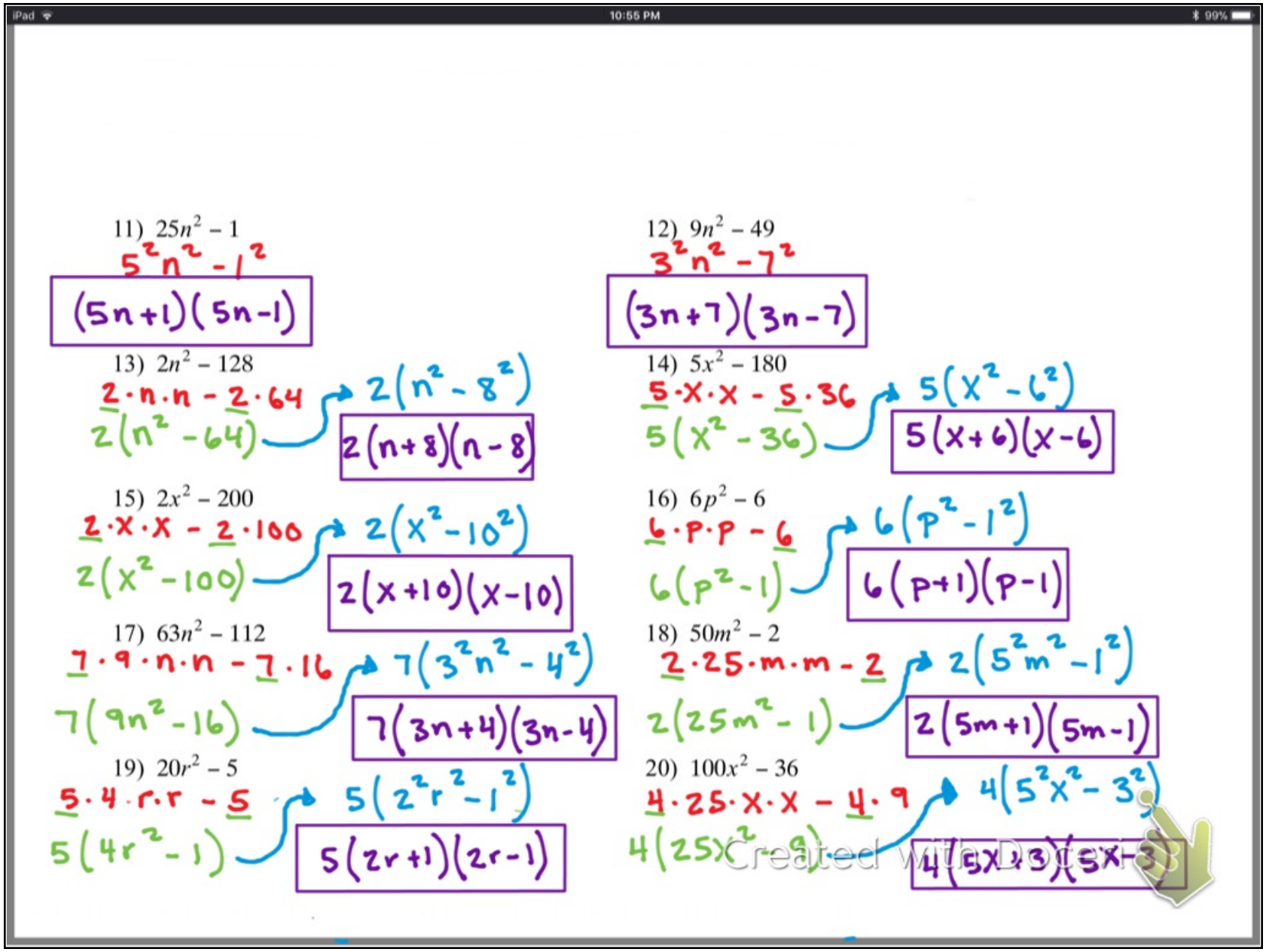
10) $49m^2 - 9$

$7^2m^2 - 3^2$

$(7m+3)(7m-3)$

11) $25n^2 - 1$

12) $9n^2 - 49$


iPad
10:55 PM
99%
11) $25n^2 - 1$
$5^2n^2 - 1^2$
$(5n+1)(5n-1)$
12) $9n^2 - 49$
$3^2n^2 - 7^2$
$(3n+7)(3n-7)$
13) $2n^2 - 128$
$2 \cdot n \cdot n - 2 \cdot 64$
$2(n^2 - 64)$
$2(n^2 - 8^2)$
$2(n+8)(n-8)$
14) $5x^2 - 180$
$5 \cdot x \cdot x - 5 \cdot 36$
$5(x^2 - 36)$
$5(x^2 - 6^2)$
$5(x+6)(x-6)$
15) $2x^2 - 200$
$2 \cdot x \cdot x - 2 \cdot 100$
$2(x^2 - 100)$
$2(x^2 - 10^2)$
$2(x+10)(x-10)$
16) $6p^2 - 6$
$6 \cdot p \cdot p - 6$
$6(p^2 - 1)$
$6(p^2 - 1^2)$
$6(p+1)(p-1)$
17) $63n^2 - 112$
$7 \cdot 9 \cdot n \cdot n - 7 \cdot 16$
$7(9n^2 - 16)$
$7(3^2n^2 - 4^2)$
$7(3n+4)(3n-4)$
18) $50m^2 - 2$
$2 \cdot 25 \cdot m \cdot m - 2$
$2(25m^2 - 1)$
$2(5^2m^2 - 1^2)$
$2(5m+1)(5m-1)$
19) $20r^2 - 5$
$5 \cdot 4 \cdot r \cdot r - 5$
$5(4r^2 - 1)$
$5(2^2r^2 - 1^2)$
$5(2r+1)(2r-1)$
20) $100x^2 - 36$
$4 \cdot 25 \cdot x \cdot x - 4 \cdot 9$
$4(25x^2 - 9)$
$4(5^2x^2 - 3^2)$
$4(5x+3)(5x-3)$
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$100x^2 - 36$

$4 \cdot 25 \cdot x \cdot x - 4 \cdot 9$

$4(25x^2 - 9)$

$4(5^2x^2 - 3^2)$

$4(5x - 3)(5x + 3)$

$100x^2 - 36$

$10^2x^2 - 6^2$

$(10x + 6)(10x - 6)$

$2(5x + 3)(10x - 6)$

$2 \cdot 2(5x + 3)(5x - 3)$

$4(5x + 3)(5x - 3)$