Correct from last day: pp. 99 - 100 # 2, 3, 6, 7, 9, 14 & **READ pp. 101-102** d

3d 6bf

2.3 Factoring Quadratic Expressions (Day 2)

I posted today's worksheet in our Google Classroom. You do not need to print it.

After the quiz, you are to copy the questions on a separate sheet of paper, and work out each answer below the question.

When you complete all 21 questions, mark it as done.

When Is a Wrestler "King of the Ring"?

Factor each trinomial below. Find your answer and notice the letter next to it. Write this letter in the box containing the number of that exercise. Keep working and you will get the gripping answer to the title question.

(1) $n^2 + 6n + 5$
(2) $n^2 + 7n + 10$
(3) $n^2 - 7n + 12$
(4) $n^2 - 11n + 28$
(5) $n^2 + 2n - 15$
(6) $n^2 - 5n - 24$
(7) $n^2 + n - 56$

Answers:

(L) $(n + 2)(n + 6)$
(H) $(n + 5)(n - 3)$
(W) $(n + 5)(n + 1)$
(E) $(n - 3)(n - 4)$
(B) $(n - 1)(n + 15)$
(S) $(n + 8)(n - 7)$
(H) $(n + 2)(n + 5)$
(E) $(n - 8)(n + 3)$
(R) $(n - 12)(n - 2)$
(N) $(n - 7)(n - 4)$

(8) $t^2 + 10t + 16$
(9) $t^2 - 15t + 50$
(10) $t^2 + 8t - 9$
(11) $t^2 - 7t - 30$
(12) $t^2 - t - 30$
(13) $t^2 + 14t + 48$
(14) $t^2 + 8t - 48$

Answers:

(N) $(t - 6)(t + 5)$
(V) $(t - 25)(t + 2)$
(T) $(t - 5)(t - 10)$
(T) $(t + 6)(t + 8)$
(O) $(t - 10)(t + 3)$
(B) $(t + 15)(t - 2)$
(I) $(t + 8)(t + 2)$
(H) $(t - 4)(t + 12)$
(S) $(t + 9)(t - 1)$
(A) $(t - 24)(t + 2)$

(15) $a^2 + 5ab + 6b^2$
(16) $a^2 - 4ab - 21b^2$
(17) $a^2 + 6ab - 7b^2$
(18) $a^2 - 14ab - 32b^2$
(19) $a^2 - 29ab + 100b^2$
(20) $a^2 + 7ab - 18b^2$
(21) $a^2 + 2ab + b^2$

Answers:

(K) $(a - 8b)(a + 4b)$
(H) $(a + 7b)(a - b)$
(A) $(a - 20b)(a + 5b)$
(E) $(a + 2b)(a + 3b)$
(W) $(a + 9b)(a - 2b)$
(T) $(a - 7b)(a + 3b)$
(O) $(a - 25b)(a - 4b)$
(S) $(a + 6b)(a + 3b)$
(N) $(a + b)(a + b)$
(R) $(a - 16b)(a + 2b)$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

p.99 3d) $2n^2-4n-70$

$=2(n^2-2n-35)$

$=2(n^2+5n-7n-35)$

$=2[n(n+5)-7(n+5)]$

$=2(n+5)(n-7)$

P: -35 S: 2

1 -35

2

3

4

5 -7

$=2(n+5)(n-7)$

p.100 6b) $y^2+6y-55$

P: -55 S: 6

-1 +55

2

3

4

-5 +11

$=(y-5)(y+11)$

f) n^2-n-90

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

14d) $(x+y)^2-5(x+y)+6$

Let $w=x+y$

w^2-5w+6

$=(w-2)(w-3)$

$=(x+y-2)(x+y-3)$

w^2-5w+6

P: 6 S: -5

-1 -6

-2 -3

$=(w-2)(w-3)$