Math11U - Functions

U1L3 - Factoring Quiz - More Factoring Practice - 2

Factor by grouping.

1) $3p^3 + 12p^2 + 4p + 16$

2) $3k^3 - 6k^2 + 2k - 4$

3) $15n^3 + 3n^2 + 20n + 4$

4) $15a^3 - 25a^2 + 12a - 20$

Factor each Difference of Squares completely. (Don't forget to check for common factors!)

5) $64x^2 - 100$

6) $9k^2 - 1$

7) $n^2 - 1$

8) $125r^2 - 20$

9) $2r^2 - 2$

10) $25n^2 - 1$

Factor each Perfect Square completely.

11) $25n^2 - 40n + 16$

12) $36p^2 + 24p + 4$

Factor each completely. Note - check for common factors!

13) $k^3 + 4k^2 - 45k$

14) $m^4 + 8m^3 + 12m^2$

15) $x^2 - x - 56$

16) $3n^2 - 45n + 168$

Factor each completely. Note - there are no common factors here.

17) $2m^2 + 21m + 54$

18) $5x^2 + 16x + 3$

19) $7b^2 - 55b - 72$

20) $3x^2 + 22x - 16$

21) $7x^2 - 5x - 18$

22) $5n^2 - 47n + 18$

23) $8v^2 - 87v + 70$

24) $9p^2 - 86p - 40$

25) $10x^2 - 61x + 6$

26) $10x^2 + 37x + 21$

Answers to U1L3 - Factoring Quiz - More Factoring Practice - 2

1) $(3p^2 + 4)(p + 4)$
2) $(3k^2 + 2)(k - 2)$
3) $(3n^2 + 4)(5n + 1)$
4) $(5a^2 + 4)(3a - 5)$
5) $4(4x + 5)(4x - 5)$
6) $(3k + 1)(3k - 1)$
7) $(n + 1)(n - 1)$
8) $5(5r + 2)(5r - 2)$
9) $2(r + 1)(r - 1)$
10) $(5n + 1)(5n - 1)$
11) $(5n - 4)^2$
12) $4(3p + 1)^2$
13) $k(k + 9)(k - 5)$
14) $m^2(m + 2)(m + 6)$
15) $(x - 8)(x + 7)$
16) $3(n - 7)(n - 8)$
17) $(2m + 9)(m + 6)$
18) $(5x + 1)(x + 3)$
19) $(7b + 8)(b - 9)$
20) $(3x - 2)(x + 8)$
21) $(7x + 9)(x - 2)$
22) $(5n - 2)(n - 9)$
23) $(v - 10)(8v - 7)$
24) $(p - 10)(9p + 4)$
25) $(x - 6)(10x - 1)$
26) $(x + 3)(10x + 7)$