

ALG 1 Ch. 23 - BOARD PROBLEMS

FACTOR.

① $2N^2 + 3N - 9$

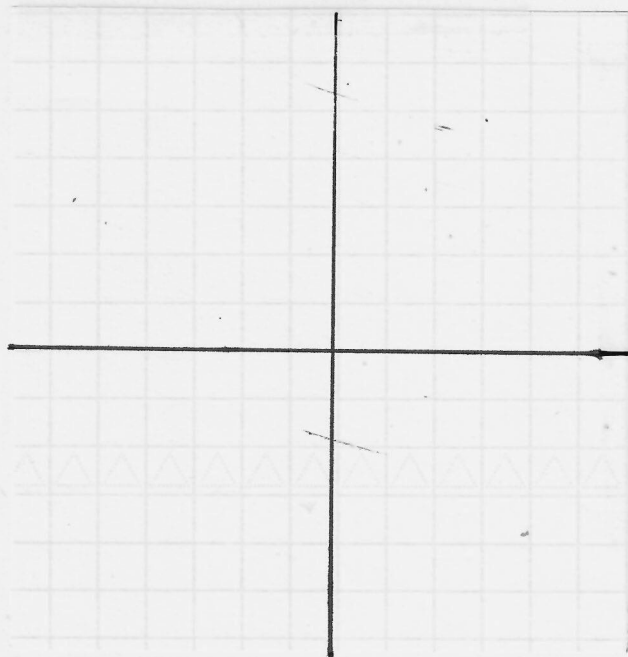
② $5x^2 + 19x + 12$

③ $9x^2 + 66x + 21$

④ $4x^2 - 35x + 49$

GRAPH.

a) $x > -5$ b) $y \geq \frac{3}{2}x - 4$ c) $y \leq 2$



Ch. 23 - FACTORING POLYNOMIALS (3)

EX. 1 $x^2 - 2x - 8$



EX. 2 $x^2 - 5x + 6$

EX. 5 $x^2 + 3x - 10$

EX. 3 $x^2 - 6x + 8$

EX. 6 $x^2 - 4x - 21$

EX. 7 $-2x^2 - 7x - 6$

PRACTICE

① $15n^2 - 27n - 6$

EX. 8 $5x^2 + 9x - 2$

② $5x^2 - 18x + 9$

③ $4x^2 - 3x + 49$

④ $-6x^2 - 25x - 25$

Factoring By Grouping

Factor each completely.

1) $8r^3 - 64r^2 + r - 8$

2) $12p^3 - 21p^2 + 28p - 49$

3) $12x^3 + 2x^2 - 30x - 5$

4) $6v^3 - 16v^2 + 21v - 56$

5) $63n^3 + 54n^2 - 105n - 90$

6) $21k^3 - 84k^2 + 15k - 60$

7) $25v^3 + 5v^2 + 30v + 6$

8) $105n^3 + 175n^2 - 75n - 125$

9) $96n^3 - 84n^2 + 112n - 98$

10) $28v^3 + 16v^2 - 21v - 12$

11) $4v^3 - 12v^2 - 5v + 15$

12) $49x^3 - 35x^2 + 56x - 40$

13) $24p^3 + 15p^2 - 56p - 35$

14) $24r^3 - 64r^2 - 21r + 56$

LESSON PRACTICE

Factor each polynomial and check by multiplying.

1. $x^2 - 7x + 10$

2. $x^2 - 7x + 6$

3. $x^2 - 9x + 14$

4. $x^2 - 7x + 12$

5. $x^2 - 9x + 8$

6. $x^2 - 10x + 21$

7. $x^2 - 12x + 27$

8. $x^2 - 11x + 30$

9. $x^2 - 19x + 90$

10. $x^2 - 14x + 33$

11. $x^2 + 4x - 21$

12. $x^2 + 2x - 35$

13. $x^2 + 3x - 18$

14. $x^2 - 5x - 36$

15. $2x^2 - 9x - 5$

16. $2x^2 + 5x - 12$