

4B-1 to 4B-3 E-learning Assignment (Copy the problems onto your own paper.)

Solve each equation by taking square roots.

1) $4m^2 - 9 = 27$

2) $2n^2 + 10 = 36$

Solve each equation by completing the square.

3) $x^2 + 4x - 37 = 8$

4) $8b^2 + 16b - 10 = -2$

Factor each by grouping.

5) $5n^3 - 2n^2 + 40n - 16$

6) $3x^3 - 24x^2 - 2x + 16$

Solve each equation by factoring.

7) $p^2 + 6p + 8 = 0$

8) $n^2 - n - 30 = 0$

Factor each completely.

9) $9n^2 + 12n + 4$

10) $n^2 + 10n + 21$

11) $7a^2 + 19a - 36$

12) $v^2 - 100$

13) $4x^2 - 9y^2$

14) $10x^2 - 50xy$

Simplify. Remember $i^2 = -1$

15) $(4 + i) + (4 - 8i)$

16) $(4 + 4i) - (4 - 6i)$

17) $(-8i)(-7 + 7i)$

18) $(-4i)(3i)(3i)$

19) $(3 + 2i)^2$

20) $(5 - 5i)(1 + 7i)$