

Practice for Q3OBQ5 Reference: Ch. 9-5 to 9-6

Date _____ Period _____

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Factor each completely.

1) $4k^2 - 12k + 9$

2) $n^2 + 6n + 9$

3) $p^2 - 2p + 1$

4) $4x^2 - 25$

5) $n^2 - 9$

6) $4m^2 - 9$

7) $4r^2 - 40r + 100$

8) $36x^2 - 96x + 64$

9) $12n^2 - 12n + 3$

10) $45b^2 - 150b + 125$

Solve each equation by factoring.

11) $2n^2 = 7n - 3$

12) $3v^2 + 2 = 5v$

13) $6n^2 = 2 - n$

14) $6a^2 - 9 = -3a$

15) $9x^2 - 33x = -18$

16) $18p^2 + 4 = -18p$

17) $18n^2 = -9 + 33n$

18) $6n^2 + 2 = -8n$

Answers to Practice for Q3OBQ5 Reference: Ch. 9-5 to 9-6 (ID: 11)

1) $(2k - 3)^2$

5) $(n + 3)(n - 3)$

9) $3(2n - 1)^2$

13) $\left\{\frac{1}{2}, -\frac{2}{3}\right\}$

17) $\left\{\frac{1}{3}, \frac{3}{2}\right\}$

2) $(n + 3)^2$

6) $(2m + 3)(2m - 3)$

10) $5(3b - 5)^2$

14) $\left\{-\frac{3}{2}, 1\right\}$

18) $\left\{-\frac{1}{3}, -1\right\}$

3) $(p - 1)^2$

7) $4(r - 5)^2$

11) $\left\{\frac{1}{2}, 3\right\}$

15) $\left\{\frac{2}{3}, 3\right\}$

4) $(2x + 5)(2x - 5)$

8) $4(3x - 4)^2$

12) $\left\{\frac{2}{3}, 1\right\}$

16) $\left\{-\frac{1}{3}, -\frac{2}{3}\right\}$