

14-05-19-T8

Solve each equation by factoring.

1) $x^2 - 4x - 21 = 0$

2) $k^2 - 10k + 21 = 0$

3) $6r^2 + 6r = 0$

4) $b^2 + 11b + 30 = 0$

5) $2n^2 - 2n - 84 = 0$

6) $p^2 + 3p + 2 = 0$

7) $2x^2 + 24x + 70 = 0$

8) $x^2 - 8x + 15 = 0$

9) $n^2 + 8n + 7 = 0$

10) $4a^2 - 56a + 192 = 0$

11) $v^2 + 9v + 20 = 0$

12) $b^2 - 2b - 35 = 0$

13) $n^2 + 5n = 0$

14) $2x^2 + 2x = 0$

15) $r^2 + 4r - 12 = 0$

16) $3x^2 - 6x - 9 = 0$

Solve each equation by completing the square.

17) $2n^2 + 6n - 8 = 0$

18) $2x^2 + 2x - 4 = 0$

19) $3x^2 + 2x - 1 = 0$

20) $2r^2 - 6r - 1 = 0$

21) $2n^2 - 6n - 3 = 0$

22) $2b^2 + 6b - 5 = 0$

23) $3k^2 - 2k - 2 = 0$

24) $2n^2 + 2n - 8 = 0$

25) $3r^2 - 2r - 5 = 0$

26) $3x^2 + 4x - 7 = 0$

27) $3a^2 - 2a - 1 = 0$

28) $2b^2 + 2b - 5 = 0$

29) $3x^2 + 4x - 8 = 0$

30) $3m^2 - 2m - 7 = 0$

31) $3n^2 - 5n - 2 = 0$

32) $2x^2 + 3x - 4 = 0$

Answers to 14-05-19-T8

1) $\{7, -3\}$

9) $\{-1, -7\}$

17) $\{1, -4\}$

3) $\{-1, 0\}$

11) $\{-5, -4\}$

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

23) $\left\{\frac{1 + \sqrt{7}}{3}, \frac{1 - \sqrt{7}}{3}\right\}$

25) $\left\{\frac{5}{3}, -1\right\}$

29) $\left\{\frac{-2 + 2\sqrt{7}}{3}, \frac{-2 - 2\sqrt{7}}{3}\right\}$

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

5) $\{7, -6\}$

13) $\{-5, 0\}$

21) $\left\{\frac{3 + \sqrt{15}}{2}, \frac{3 - \sqrt{15}}{2}\right\}$

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

7) $\{-5, -7\}$

15) $\{-6, 2\}$