

## 112B MATH

**Solve each equation by factoring.**

1)  $n^2 + 9n + 14 = 0$

2)  $n^2 + 3n - 18 = 0$

3)  $7n^2 + 28n - 84 = 0$

4)  $7x^2 + 98x + 343 = 0$

5)  $n^2 + 10n + 24 = 0$

6)  $8x^2 + 32x + 24 = 0$

7)  $n^2 + 10n + 21 = 0$

8)  $p^2 - 6p - 16 = 0$

9)  $5k^2 - 30k = 0$

10)  $n^2 + 11n + 30 = 0$

11)  $10m^2 - 75m + 125 = 0$

12)  $2x^2 + 3x - 2 = 0$

13)  $6x^2 - 34x + 20 = 0$

14)  $15m^2 - 13m + 2 = 0$

15)  $5n^2 - 21n + 4 = 0$

16)  $25v^2 + 110v + 40 = 0$

17)  $5v^2 - 22v + 8 = 0$

18)  $10m^2 + 28m + 16 = 0$

19)  $15x^2 + 87x + 60 = 0$

20)  $8x^2 + 28x + 24 = 0$

21)  $5m^2 - 28m + 17 = 2$

22)  $5a^2 - 12a + 1 = -3$

23)  $2n^2 + 13n + 20 = 5$

24)  $5m^2 - 21m + 7 = 3$

$$25) 12n^2 + 10n - 53 = -3$$

$$26) 20x^2 - 76x - 12 = 4$$

$$27) 5r^2 + 16r - 18 = -2$$

$$28) 5p^2 + 26p + 9 = 4$$

$$29) 3n^2 + 19n + 17 = -3$$

$$30) 5k^2 - 21k - 15 = 5$$

$$31) 2m^2 - 15m + 22 = -3$$

$$32) 6k^2 + 13k + 11 = 5$$

## 112B MATH

**Solve each equation by factoring.**

1)  $n^2 + 9n + 14 = 0$

$\{-2, -7\}$

3)  $7n^2 + 28n - 84 = 0$

$\{2, -6\}$

5)  $n^2 + 10n + 24 = 0$

$\{-6, -4\}$

7)  $n^2 + 10n + 21 = 0$

$\{-7, -3\}$

9)  $5k^2 - 30k = 0$

$\{6, 0\}$

11)  $10m^2 - 75m + 125 = 0$

$\left\{\frac{5}{2}, 5\right\}$

13)  $6x^2 - 34x + 20 = 0$

$\left\{\frac{2}{3}, 5\right\}$

15)  $5n^2 - 21n + 4 = 0$

$\left\{\frac{1}{5}, 4\right\}$

17)  $5v^2 - 22v + 8 = 0$

$\left\{\frac{2}{5}, 4\right\}$

19)  $15x^2 + 87x + 60 = 0$

$\left\{-\frac{4}{5}, -5\right\}$

21)  $5m^2 - 28m + 17 = 2$

$\left\{\frac{3}{5}, 5\right\}$

23)  $2n^2 + 13n + 20 = 5$

$\left\{-\frac{3}{2}, -5\right\}$

2)  $n^2 + 3n - 18 = 0$

$\{-6, 3\}$

4)  $7x^2 + 98x + 343 = 0$

$\{-7\}$

6)  $8x^2 + 32x + 24 = 0$

$\{-3, -1\}$

8)  $p^2 - 6p - 16 = 0$

$\{8, -2\}$

10)  $n^2 + 11n + 30 = 0$

$\{-5, -6\}$

12)  $2x^2 + 3x - 2 = 0$

$\left\{\frac{1}{2}, -2\right\}$

14)  $15m^2 - 13m + 2 = 0$

$\left\{\frac{2}{3}, \frac{1}{5}\right\}$

16)  $25v^2 + 110v + 40 = 0$

$\left\{-\frac{2}{5}, -4\right\}$

18)  $10m^2 + 28m + 16 = 0$

$\left\{-\frac{4}{5}, -2\right\}$

20)  $8x^2 + 28x + 24 = 0$

$\left\{-\frac{3}{2}, -2\right\}$

22)  $5a^2 - 12a + 1 = -3$

$\left\{\frac{2}{5}, 2\right\}$

24)  $5m^2 - 21m + 7 = 3$

$\left\{\frac{1}{5}, 4\right\}$

$$25) 12n^2 + 10n - 53 = -3$$

$$\left\{ \frac{5}{3}, -\frac{5}{2} \right\}$$

$$27) 5r^2 + 16r - 18 = -2$$

$$\left\{ \frac{4}{5}, -4 \right\}$$

$$29) 3n^2 + 19n + 17 = -3$$

$$\left\{ -\frac{4}{3}, -5 \right\}$$

$$31) 2m^2 - 15m + 22 = -3$$

$$\left\{ \frac{5}{2}, 5 \right\}$$

$$26) 20x^2 - 76x - 12 = 4$$

$$\left\{ -\frac{1}{5}, 4 \right\}$$

$$28) 5p^2 + 26p + 9 = 4$$

$$\left\{ -\frac{1}{5}, -5 \right\}$$

$$30) 5k^2 - 21k - 15 = 5$$

$$\left\{ -\frac{4}{5}, 5 \right\}$$

$$32) 6k^2 + 13k + 11 = 5$$

$$\left\{ -\frac{3}{2}, -\frac{2}{3} \right\}$$