

**Solve each equation by factoring.**

1)  $2k^2 = -5 + 11k$

2)  $3n^2 + 5 = 8n$

3)  $5x^2 = 29x + 6$

4)  $4b^2 + 5b = 6$

5)  $3n^2 + 7 = 10n$

6)  $5x^2 - 17x = 40$

7)  $3n^2 = -20n - 12$

8)  $25n^2 + 55n = -24$

9)  $15m^2 - 31m = -10$

10)  $3n^2 - 29n = -40$

$$11) \ 8x^2 = -25x + 28$$

$$12) \ 5n^2 + 27n = -10$$

$$13) \ 5n^2 + 6 = 11n$$

$$14) \ 2n^2 - 11n = 21$$

$$15) \ 3x^2 = 4x + 4$$

$$16) \ 7x^2 = -15x + 18$$

$$17) \ 7x^2 - 25x = 12$$

$$18) \ 3x^2 + 2 = -5x$$

$$19) \ 5n^2 - 4n = 0$$

$$20) \ 8n^2 + 15 = 43n$$

## Answers to

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

5)  $\left\{\frac{7}{3}, 1\right\}$

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

13)  $\left\{\frac{6}{5}, 1\right\}$

17)  $\left\{-\frac{3}{7}, 4\right\}$

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

6)  $\left\{-\frac{8}{5}, 5\right\}$

10)  $\left\{\frac{5}{3}, 8\right\}$

14)  $\left\{-\frac{3}{2}, 7\right\}$

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

3)  $\left\{-\frac{1}{5}, 6\right\}$

7)  $\left\{-\frac{2}{3}, -6\right\}$

11)  $\left\{\frac{7}{8}, -4\right\}$

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

19)  $\left\{\frac{4}{5}, 0\right\}$

4)  $\left\{\frac{3}{4}, -2\right\}$

8)  $\left\{-\frac{3}{5}, -\frac{8}{5}\right\}$

12)  $\left\{-\frac{2}{5}, -5\right\}$

16)  $\left\{\frac{6}{7}, -3\right\}$

20)  $\left\{\frac{3}{8}, 5\right\}$

