

# 2次方程式

年 組 名前

/18

■ 次の方程式を解きなさい。

①  $5x^2 + 1 = 181$

$x =$

②  $49x^2 - 8 = 17$

$x =$

③  $x^2 + 2 = 18$

$x =$

④  $2x^2 - 16 = 0$

$x =$

⑤  $147x^2 + 8 = 53$

$x =$

⑥  $x^2 - 48 = 0$

$x =$

⑦  $36x^2 + 17 = 117$

$x =$

⑧  $4x^2 + 29 = 104$

$x =$

⑨  $98x^2 - 58 = 0$

$x =$

⑩  $2x^2 + 14 = 70$

$x =$

⑪  $45x^2 = 140$

$x =$

⑫  $2x^2 - 2 = 0$

$x =$

⑬  $4x^2 = 63$

$x =$

⑭  $49x^2 - 22 = 0$

$x =$

⑮  $4x^2 - 25 = 0$

$x =$

⑯  $6x^2 - 180 = 0$

$x =$

⑰  $20x^2 = 15$

$x =$

⑱  $x^2 + 2 = 34$

$x =$

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■ 次の方程式を解きなさい。

①  $5x^2 + 1 = 181$

$5x^2 = 180$

$x^2 = 36$

$x = \pm 6$

②  $49x^2 - 8 = 17$

$49x^2 = 25$

$x^2 = \frac{25}{49}$

$x = \pm \frac{5}{7}$

③  $x^2 + 2 = 18$

$x^2 = 16$

$x = \pm 4$

④  $2x^2 - 16 = 0$

$2x^2 = 16$

$x^2 = 8$

$x = \pm 2\sqrt{2}$

⑤  $147x^2 + 8 = 53$

$147x^2 = 45$

$49x^2 = 15$

$x^2 = \frac{15}{49}$

$x = \pm \frac{\sqrt{15}}{7}$

⑥  $x^2 - 48 = 0$

$x^2 = 48$

$x = \pm 4\sqrt{3}$

⑦  $36x^2 + 17 = 117$

$36x^2 = 100$

$9x^2 = 25$

$x^2 = \frac{25}{9}$

$x = \pm \frac{5}{3}$

⑧  $4x^2 + 29 = 104$

$4x^2 = 75$

$x^2 = \frac{75}{4}$

$x = \pm \frac{5\sqrt{3}}{2}$

⑨  $98x^2 - 58 = 0$

$98x^2 = 58$

$49x^2 = 29$

$x^2 = \frac{29}{49}$

$x = \pm \frac{\sqrt{29}}{7}$

⑩  $2x^2 + 14 = 70$

$2x^2 = 56$

$x^2 = 28$

$x = \pm 2\sqrt{7}$

⑪  $45x^2 = 140$

$9x^2 = 28$

$x^2 = \frac{28}{9}$

$x = \pm \frac{2\sqrt{7}}{3}$

⑫  $2x^2 - 2 = 0$

$2x^2 = 2$

$x^2 = 1$

$x = \pm 1$

⑬  $4x^2 = 63$

$x^2 = \frac{63}{4}$

$x = \pm \frac{3\sqrt{7}}{2}$

⑭  $49x^2 - 22 = 0$

$49x^2 = 22$

$x^2 = \frac{22}{49}$

$x = \pm \frac{\sqrt{22}}{7}$

⑮  $4x^2 - 25 = 0$

$4x^2 = 25$

$x^2 = \frac{25}{4}$

$x = \pm \frac{5}{2}$

⑯  $6x^2 - 180 = 0$

$6x^2 = 180$

$x^2 = 30$

$x = \pm \sqrt{30}$

⑰  $20x^2 = 15$

$4x^2 = 3$

$x^2 = \frac{3}{4}$

$x = \pm \frac{\sqrt{3}}{2}$

⑱  $x^2 + 2 = 34$

$x^2 = 32$

$x = \pm 4\sqrt{2}$