

# 2次方程式

年 組 名前

/18

■ 次の方程式を解きなさい。

①  $x^2 + 1 = 10$

$x =$

②  $2x^2 - 104 = 0$

$x =$

③  $4x^2 - 8 = 0$

$x =$

④  $x^2 - 1 = 0$

$x =$

⑤  $36x^2 + 3 = 19$

$x =$

⑥  $4x^2 + 6 = 55$

$x =$

⑦  $147x^2 = 75$

$x =$

⑧  $25x^2 - 21 = 0$

$x =$

⑨  $4x^2 = 112$

$x =$

⑩  $4x^2 = 75$

$x =$

⑪  $32x^2 - 126 = 0$

$x =$

⑫  $36x^2 + 3 = 31$

$x =$

⑬  $25x^2 + 10 = 36$

$x =$

⑭  $49x^2 = 16$

$x =$

⑮  $48x^2 = 135$

$x =$

⑯  $3x^2 = 45$

$x =$

⑰  $2x^2 - 3 = 13$

$x =$

⑱  $4x^2 - 1 = 44$

$x =$

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■ 次の方程式を解きなさい。

①  $x^2 + 1 = 10$

$x^2 = 9$

$x = \pm 3$

②  $2x^2 - 104 = 0$

$2x^2 = 104$

$x^2 = 52$

$x = \pm 2\sqrt{13}$

③  $4x^2 - 8 = 0$

$4x^2 = 8$

$x^2 = 2$

$x = \pm \sqrt{2}$

④  $x^2 - 1 = 0$

$x^2 = 1$

$x = \pm 1$

⑤  $36x^2 + 3 = 19$

$36x^2 = 16$

$9x^2 = 4$

$x^2 = \frac{4}{9}$

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

⑥  $4x^2 + 6 = 55$

$4x^2 = 49$

$x^2 = \frac{49}{4}$

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

⑦  $147x^2 = 75$

$49x^2 = 25$

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

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

⑧  $25x^2 - 21 = 0$

$25x^2 = 21$

$x^2 = \frac{21}{25}$

$x = \pm \frac{\sqrt{21}}{5}$

⑨  $4x^2 = 112$

$x^2 = 28$

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

⑩  $4x^2 = 75$

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

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

⑪  $32x^2 - 126 = 0$

$32x^2 = 126$

$16x^2 = 63$

$x^2 = \frac{63}{16}$

$x = \pm \frac{3\sqrt{7}}{4}$

⑫  $36x^2 + 3 = 31$

$36x^2 = 28$

$9x^2 = 7$

$x^2 = \frac{7}{9}$

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

⑬  $25x^2 + 10 = 36$

$25x^2 = 26$

$x^2 = \frac{26}{25}$

$x = \pm \frac{\sqrt{26}}{5}$

⑭  $49x^2 = 16$

$x^2 = \frac{16}{49}$

$x = \pm \frac{4}{7}$

⑮  $48x^2 = 135$

$16x^2 = 45$

$x^2 = \frac{45}{16}$

$x = \pm \frac{3\sqrt{5}}{4}$

⑯  $3x^2 = 45$

$x^2 = 15$

$x = \pm \sqrt{15}$

⑰  $2x^2 - 3 = 13$

$2x^2 = 16$

$x^2 = 8$

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

⑱  $4x^2 - 1 = 44$

$4x^2 = 45$

$x^2 = \frac{45}{4}$

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