2次方程式

■ 次の方程式を解きなさい。

① $3x^2 + 2 = 77$

$x =$

② $16x^2 - 7 = 68$

$x =$

③ $25x^2 = 22$

$x =$

④ $2x^2 - 16 = 88$

$x =$

⑤ $4x^2 - 75 = 0$

$x =$

⑥ $4x^2 - 19 = 0$

$x =$

⑦ $36x^2 + 2 = 31$

$x =$

⑧ $98x^2 - 1 = 3$

$x =$

⑨ $x^2 = 63$

$x =$

⑩ $x^2 - 17 = 0$

$x =$

⑪ $3x^2 = 96$

$x =$

⑫ $49x^2 = 9$

$x =$

⑬ $x^2 + 5 = 25$

$x =$

⑭ $3x^2 = 105$

$x =$

⑮ $8x^2 - 18 = 0$

$x =$

⑯ $9x^2 = 28$

$x =$

⑰ $8x^2 - 96 = 0$

$x =$

⑱ $4x^2 - 136 = 0$

$x =$

2次方程式

年　　組　名前

■ 次の方程式を解きなさい。

① $3x^2 + 2 = 77$

$3x^2 = 75$

$x^2 = 25$

$$x = \pm 5$$

② $16x^2 - 7 = 68$

$16x^2 = 75$

$x^2 = \dfrac{75}{16}$

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

③ $25x^2 = 22$

$x^2 = \dfrac{22}{25}$

$$x = \pm \dfrac{\sqrt{22}}{5}$$

④ $2x^2 - 16 = 88$

$2x^2 = 104$

$x^2 = 52$

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

⑤ $4x^2 - 75 = 0$

$4x^2 = 75$

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

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

⑥ $4x^2 - 19 = 0$

$4x^2 = 19$

$x^2 = \dfrac{19}{4}$

$$x = \pm \dfrac{\sqrt{19}}{2}$$

⑦ $36x^2 + 2 = 31$

$36x^2 = 29$

$x^2 = \dfrac{29}{36}$

$$x = \pm \dfrac{\sqrt{29}}{6}$$

⑧ $98x^2 - 1 = 3$

$98x^2 = 4$

$49x^2 = 2$

$x^2 = \dfrac{2}{49}$

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

⑨ $x^2 = 63$

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

⑩ $x^2 - 17 = 0$

$x^2 = 17$

$$x = \pm\sqrt{17}$$

⑪ $3x^2 = 96$

$x^2 = 32$

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

⑫ $49x^2 = 9$

$x^2 = \dfrac{9}{49}$

$$x = \pm \dfrac{3}{7}$$

⑬ $x^2 + 5 = 25$

$x^2 = 20$

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

⑭ $3x^2 = 105$

$x^2 = 35$

$$x = \pm\sqrt{35}$$

⑮ $8x^2 - 18 = 0$

$8x^2 = 18$

$4x^2 = 9$

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

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

⑯ $9x^2 = 28$

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

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

⑰ $8x^2 - 96 = 0$

$8x^2 = 96$

$x^2 = 12$

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

⑱ $4x^2 - 136 = 0$

$4x^2 = 136$

$x^2 = 34$

$$x = \pm\sqrt{34}$$