

What Should You Do If Nobody Will Sing With You?



Simplify each expression. Find your answer below the exercise and notice the letter next to it. Write this letter in the box at the bottom of the page that contains the number of that exercise.

① $2\sqrt{5} + 4\sqrt{5}$

② $7\sqrt{3} - 3\sqrt{3}$

③ $2\sqrt{6} - 7\sqrt{6}$

④ $5\sqrt{x} + \sqrt{x}$

⑤ $9\sqrt{5} - 8\sqrt{5}$

Ⓛ $4\sqrt{5}$

ⓔ $4\sqrt{3}$

Ⓜ $6\sqrt{x}$

Ⓡ $3\sqrt{x}$

Ⓣ $6\sqrt{5}$

Ⓝ $6\sqrt{3}$

Ⓐ $\sqrt{5}$

Ⓤ $-5\sqrt{6}$

⑥ $5\sqrt{10} + 4\sqrt{10} - \sqrt{10}$

⑦ $2\sqrt{3} - 6\sqrt{3} - 3\sqrt{3}$

⑧ $6\sqrt{7} + 3\sqrt{3} - 2\sqrt{7}$

⑨ $\sqrt{2} - 4\sqrt{6} + 5\sqrt{2} + \sqrt{6}$

⑩ $3\sqrt{a} + 9\sqrt{b} - \sqrt{b} - 2\sqrt{a}$

ⓗ $8\sqrt{3}$

Ⓢ $4\sqrt{2} - \sqrt{6}$

ⓔ $8\sqrt{10}$

ⓕ $4\sqrt{7} + 3\sqrt{3}$

Ⓡ $\sqrt{a} + 8\sqrt{b}$

Ⓐ $3\sqrt{a} + 7\sqrt{b}$

Ⓣ $-7\sqrt{3}$

Ⓨ $6\sqrt{2} - 3\sqrt{6}$

⑪ $3\sqrt{12} + 4\sqrt{3}$

⑫ $8\sqrt{5} - 2\sqrt{45}$

⑬ $7\sqrt{18} + 2\sqrt{50}$

⑭ $6\sqrt{24} - 5\sqrt{54}$

⑮ $-\sqrt{27} + 4\sqrt{48}$

Ⓡ $-3\sqrt{6}$

ⓔ $10\sqrt{3}$

Ⓢ $-4\sqrt{3}$

Ⓛ $2\sqrt{6}$

Ⓣ $2\sqrt{5}$

Ⓝ $13\sqrt{3}$

ⓔ $24\sqrt{2}$

Ⓞ $31\sqrt{2}$

⑯ $5\sqrt{8} + \sqrt{98} - 2\sqrt{18}$

⑰ $2\sqrt{90} - 3\sqrt{20} + \sqrt{40}$

⑱ $4\sqrt{63} - 9\sqrt{28} + 2\sqrt{44}$

⑲ $2\sqrt{27x} + \sqrt{75x} + 5\sqrt{12x}$

⑳ $-6\sqrt{9x} + 3\sqrt{64x} - \sqrt{50x}$

Ⓟ $8\sqrt{3x}$

Ⓤ $6\sqrt{x} - 5\sqrt{2x}$

Ⓛ $11\sqrt{2}$

Ⓢ $-6\sqrt{7} + 4\sqrt{11}$

Ⓢ $\sqrt{10} - 9\sqrt{5}$

Ⓣ $8\sqrt{10} - 6\sqrt{5}$

Ⓚ $21\sqrt{3x}$

Ⓟ $3\sqrt{7} + \sqrt{11}$

10	2	15	7	5	17	20	11	1	9	13	3	14	18	6	16	8	19	4	12
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$$\textcircled{1} 2\sqrt{5} + 4\sqrt{5} = 6\sqrt{5}$$

$$\textcircled{2} 7\sqrt{3} - 3\sqrt{3} = 4\sqrt{3}$$

$$\textcircled{3} 2\sqrt{6} - 7\sqrt{6} = -5\sqrt{6}$$

$$\textcircled{4} 5\sqrt{x} + 1\sqrt{x} = 6\sqrt{x}$$

$$\textcircled{5} 9\sqrt{5} - 8\sqrt{5} = 1\sqrt{5}$$

$$\textcircled{6} 5\sqrt{10} + 4\sqrt{10} - \sqrt{10} = 8\sqrt{10}$$

$$\textcircled{7} 2\sqrt{3} - 6\sqrt{3} - 3\sqrt{3} = -7\sqrt{3}$$

$$\textcircled{8} 6\sqrt{7} + 3\sqrt{3} - 2\sqrt{7} = 4\sqrt{7} + 3\sqrt{3}$$

$$\textcircled{9} \sqrt{2} - 4\sqrt{6} + 5\sqrt{2} + \sqrt{6} = 6\sqrt{2} - 3\sqrt{6}$$

$$\textcircled{10} 3\sqrt{a} + 9\sqrt{b} - \sqrt{b} - 2\sqrt{a} = 1\sqrt{a} + 8\sqrt{b}$$

$$\textcircled{11} 3\sqrt{12} + 4\sqrt{3}$$

$$3\sqrt{4 \cdot 3} + 4\sqrt{3}$$

$$3 \cdot 2\sqrt{3} + 4\sqrt{3}$$

$$6\sqrt{3} + 4\sqrt{3} = \boxed{10\sqrt{3}}$$

$$\textcircled{12} 8\sqrt{5} - 2\sqrt{45}$$

$$8\sqrt{5} - 2\sqrt{9 \cdot 5}$$

$$8\sqrt{5} - 2 \cdot 3\sqrt{5}$$

$$8\sqrt{5} - 6\sqrt{5} = \boxed{2\sqrt{5}}$$

$$\textcircled{13} 7\sqrt{18} + 2\sqrt{50}$$

$$7\sqrt{9 \cdot 2} + 2\sqrt{25 \cdot 2}$$

$$7 \cdot 3\sqrt{2} + 2 \cdot 5\sqrt{2}$$

$$21\sqrt{2} + 10\sqrt{2} = \boxed{31\sqrt{2}}$$

$$\textcircled{14} 6\sqrt{24} - 5\sqrt{54}$$

$$6\sqrt{4 \cdot 6} - 5\sqrt{9 \cdot 6}$$

$$6 \cdot 2\sqrt{6} - 5 \cdot 3\sqrt{6}$$

$$12\sqrt{6} - 15\sqrt{6} = \boxed{-3\sqrt{6}}$$

$$\textcircled{15} -\sqrt{27} + 4\sqrt{48}$$

$$-\sqrt{9 \cdot 3} + 4\sqrt{16 \cdot 3}$$

$$-3\sqrt{3} + 4 \cdot 4\sqrt{3}$$

$$-3\sqrt{3} + 16\sqrt{3} = \boxed{13\sqrt{3}}$$

$$\textcircled{16} 5\sqrt{8} + \sqrt{98} - 2\sqrt{18}$$

$$5\sqrt{4 \cdot 2} + \sqrt{49 \cdot 2} - 2\sqrt{9 \cdot 2}$$

$$5 \cdot 2\sqrt{2} + 7\sqrt{2} - 2 \cdot 3\sqrt{2}$$

$$10\sqrt{2} + 7\sqrt{2} - 6\sqrt{2}$$

$$\boxed{11\sqrt{2}}$$

$$\textcircled{17} 2\sqrt{90} - 3\sqrt{20} + \sqrt{40}$$

$$2\sqrt{9 \cdot 10} - 3\sqrt{4 \cdot 5} + \sqrt{4 \cdot 10}$$

$$2 \cdot 3\sqrt{10} - 3 \cdot 2\sqrt{5} - 2\sqrt{10}$$

$$6\sqrt{10} - 6\sqrt{5} - 2\sqrt{10}$$

$$\boxed{4\sqrt{10} - 6\sqrt{5}}$$

$$\begin{aligned} \textcircled{18} \quad & 4\sqrt{63} - 9\sqrt{28} + 2\sqrt{44} \\ & 4\sqrt{9 \cdot 7} - 9\sqrt{4 \cdot 7} + 2\sqrt{4 \cdot 11} \\ & 4 \cdot 3\sqrt{7} - 9 \cdot 2\sqrt{7} + 2 \cdot 2\sqrt{11} \\ & 12\sqrt{7} - 18\sqrt{7} + 4\sqrt{11} \end{aligned}$$

$$\boxed{-6\sqrt{7} + 4\sqrt{11}}$$

$$\begin{aligned} \textcircled{19} \quad & 2\sqrt{27x} + \sqrt{75x} + 5\sqrt{12x} \\ & 2\sqrt{9 \cdot 3x} + \sqrt{25 \cdot 3x} + 5\sqrt{4 \cdot 3x} \\ & 2 \cdot 3\sqrt{3x} + 5\sqrt{3x} + 5 \cdot 2\sqrt{3x} \\ & 6\sqrt{3x} + 5\sqrt{3x} + 10\sqrt{3x} \end{aligned}$$

$$\boxed{21\sqrt{3x}}$$

$$\begin{aligned} \textcircled{20} \quad & -6\sqrt{9x} + 3\sqrt{64x} - \sqrt{50x} \\ & -6\sqrt{9x} + 3\sqrt{64x} - \sqrt{25 \cdot 2x} \\ & -6 \cdot 3\sqrt{x} + 3 \cdot 8\sqrt{x} - 5\sqrt{2x} \\ & -18\sqrt{x} + 24\sqrt{x} - 5\sqrt{2x} \end{aligned}$$

$$\boxed{6\sqrt{x} - 5\sqrt{2x}}$$