

Name: _____

Grade: _____

Score: _____

Worksheet #5



SQUARES & CUBES

Learning goal: Students will simplify expressions involving squares, square roots, cubes, and cube roots using step-by-step calculations.

Instructions: Solve and state if it's a perfect square or not.

$$\sqrt{(\sqrt{122500} + 2^{10} + 3^3.)}$$

$$\sqrt{122500} = 350$$

$$2^{10} = 1024$$

$$3^3 = 27$$

$$350 + 1024 + 27 = 1401$$

$$= \sqrt{1401}$$

$$\sqrt{(\sqrt{184900} + 4^8 + 3^3.)}$$

$$\sqrt[3]{(\sqrt{136900} + 5^7 + 4^2.)}$$

$$\sqrt[3]{(\sqrt{202500} + 7^4 + 2^5.)}$$

$$\sqrt{(\sqrt{152100} + 3^8 + 2^4.)}$$

$$\sqrt{(\sqrt{220900} + 2^{11} + 5^2.)}$$

Name: _____

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Worksheet #5(Answers)

**SQUARES & CUBES**

Learning goal: Students will simplify expressions involving squares, square roots, cubes, and cube roots using step-by-step calculations.

Instructions: Solve and state if it's a perfect square or not.

$$\sqrt{(\sqrt{122500} + 2^{10} + 3^3.)}$$

$$\sqrt{122500} = 350$$

$$2^{10} = 1024$$

$$3^3 = 27$$

$$350 + 1024 + 27 = 1401$$

$$= \sqrt{1401}$$

$$\sqrt{(\sqrt{184900} + 4^8 + 3^3.)}$$

$$\sqrt{184900} = 430$$

$$4^8 = 65536$$

$$3^3 = 27$$

$$430 + 65536 + 27 = 65993$$

$$= \sqrt{65993}$$

$$\sqrt[3]{(\sqrt{136900} + 5^7 + 4^2.)}$$

$$\sqrt{136900} = 370$$

$$5^7 = 78125$$

$$4^2 = 16$$

$$370 + 78125 + 16 = 78511$$

$$= \sqrt[3]{78511}$$

$$\sqrt[3]{(\sqrt{202500} + 7^4 + 2^5.)}$$

$$\sqrt{202500} = 450$$

$$7^3 = 2401$$

$$2^5 = 32$$

$$450 + 2401 + 32 = 2883$$

$$= \sqrt[3]{2883}$$

$$\sqrt{(\sqrt{152100} + 3^8 + 2^4.)}$$

$$\sqrt{152100} = 390$$

$$3^8 = 6561$$

$$2^4 = 16$$

$$390 + 6561 + 16 = 6967$$

$$= \sqrt{6967}$$

$$\sqrt{(\sqrt{220900} + 2^{11} + 5^2.)}$$

$$\sqrt{220900} = 470$$

$$2^{11} = 2048$$

$$5^2 = 25$$

$$470 + 2048 + 25 = 2543$$

$$= \sqrt{2543}$$