Worksheet #2



## **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.

$$\sqrt{\sqrt{225} + 5^2 + 3^3}.$$

$$\sqrt{225} = 15$$

$$5^2=25$$

$$3^2 = 27$$

$$15 + 25 + 27 = 67$$

$$=\sqrt[3]{67}$$

$$\sqrt{\left(\sqrt{625}+2^6+3^2
ight)}.$$

TM

$$\sqrt{\left(\sqrt{256}+3^2+2^4
ight)}.$$

$$\sqrt[3]{\left(\sqrt{900}+5^3+4^2
ight)}.$$

BELIEVE YOURSELF

$$\sqrt[3]{\left(\sqrt{400}+4^3+2^5
ight)}.$$

$$\sqrt{\left(\sqrt{1024}+3^4+2^3
ight)}.$$

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Worksheet #2(Answers)



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**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.

$$egin{align} \sqrt{\sqrt{225}+5^2+3^3}.\ \sqrt{225}&=15\ 5^2&=25\ 3^2&=27\ 15+25+27&=67\ &=\sqrt[3]{67} \ \end{pmatrix}$$

$$egin{align} \sqrt{\left(\sqrt{625}+2^6+3^2
ight)}.\ \sqrt{625}&=25\ 2^6&=64\ 25+64+9&=98\ &=\sqrt{98} \ \end{pmatrix}$$

$$egin{aligned} \sqrt[3]{\left(\sqrt{900}+5^3+4^2
ight)}.\ \sqrt{900}&=30\ 4^2&=16\ 30+125+16&=171\ &=\sqrt[3]{171} \end{aligned}$$

$$egin{aligned} \sqrt[3]{\left(\sqrt{400}+4^3+2^5
ight)}.\ \sqrt{400}&=20\ 4^3&=64\ 2^5&=32\ 20+64+32&=116\ =\sqrt[3]{116} \end{aligned}$$

$$\sqrt{\left(\sqrt{1024}+3^4+2^3
ight)}.$$
 $\sqrt{1024}=32$ 
 $3^4=81$ 
 $2^3=8$ 
 $32+81+8=121$ 
 $=\sqrt{121}=11$