**Course: SAT ACT Prep**

**Subject: Mathematical Reasoning**

**Topic: Arithmetic**

**Subtopic: Operations with Radicals**

**Document: Quick Drill A Resource**

**Lesson Number: 4**

**Reference Number: 1004-7**

*https://youtube.com/c/MrMattTheTutor*



1. What is the value of the expression $\left(\frac{X^{2}+2}{Y^{2}-3}\right)$ when $X=2\sqrt{2}$ and $Y=3\sqrt{2}$ ?



1. What is the value of the expression $\left(\frac{2X+Y}{2Y-X}\right)^{2}$ when $X=3\sqrt{2}$ and $Y=2\sqrt{2}$ ?
2. If $\sqrt[3]{27}+\sqrt[2]{Y}=\sqrt[3]{125}$, what is the value of Y?



1. If $\sqrt[3]{64}+\sqrt[2]{Y}=\sqrt[3]{216}$, what is the value of Y?



1. If $\frac{\sqrt[3]{M}}{3}$ is a positive integer, what is the smallest possible positive integer value of M?

 

1. If $\frac{\sqrt[4]{N}}{4}$ is a positive even integer, what is the smallest possible positive integer value of N?

