

GC4AVPV: Precalculus/Applied 20S
Mr. Wagonmaker

Name: _____

The final coordinates are located at:

N 49° AB.CDE

W 097° FG.HIJ

A. A right cone has a height of 14 cm and a volume of 91.63 cm^3 . What is the diameter of its base?

B. Given the function $f(x) = x^2 - 2$, determine the value of the range when the domain is -3 .

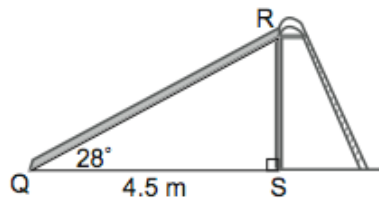
C. Simplify this radical. The simplified radicand is C. $\sqrt[3]{864}$

D. Determine the x -value at the x -intercept for the line that passes through $(13, -4)$ and $(3, 1)$.

E. Determine the greatest common factor of 315 and 234.

FG. Glacier Ice is going door-to-door selling boxes of chocolates for a fundraiser. He can sell a box of chocolate-covered raisins for \$3.00 or a box of chocolate-covered almonds for \$4.00. At the end of the afternoon, he has sold 35 boxes total and he has collected \$121.00. How many boxes of chocolate-covered almonds did he sell?

H. Given the following diagram of a playground slide. Determine the length of the slide (\overline{QR}). Round to the nearest metre.



I. Factor completely. Your answer will be in the form $a(bx - c)(dx + e)$. The value of e is the desired number. $12x^2 - 10x - 8$

J. A circle with diameter AB has a centre at M $(7, -2)$. Given A $(11, -4)$, determine the coordinates of B. The x -value is J.