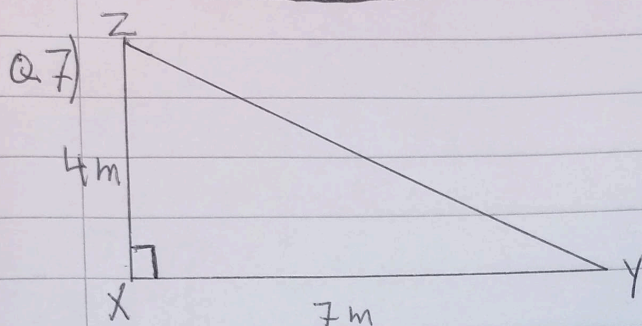


Time: 16:00
 Date: 3/11/2020
 Module Code: ACHA3000
 Student ID: 2005263

Q6) $S(2x^2 - y^2) - x^2(x^2 - y) - x^2y - x^4$
 $10x^2 - 5y^2 - x^4 + x^2y - x^2y - x^4$
 $(10x^2 - 5y^2 - 2x^4)$



50(HTA)

i) $\tan^{-1} \frac{4}{7} = \frac{4}{7}$
 $\theta = \tan^{-1} \left(\frac{4}{7} \right)$
 $\theta = 29.7449^\circ$

ii) $\angle Z = 180 - 90 - 29.7449$
 $\angle Z = 60.2551^\circ$

iii) $ZY^2 = 4^2 + 7^2$
 $ZY^2 = 16 + 49$
 $ZY^2 = 65$
 $ZY = \sqrt{65}$
 $ZY = 8.06 \text{ m}$

Q8) i) $\sqrt[3]{x} = x^{\frac{1}{3}}$

ii) $1 = x^0$