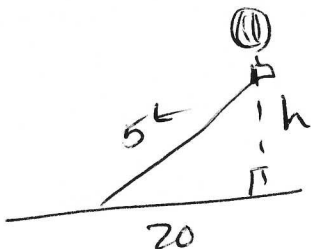


4. a) $(f+g)(5) = f(5) + g(5) = 6 + 7 = 13$

b) $g^{-1}(6)$ does not exist since g is not 1-1.

c) $(f \circ g)(5) = f(g(5)) = f(7) = 5$

5.



~~$5t^2 + 20^2 =$~~

$$20^2 + h^2 = (5t)^2$$

$$h^2 = (5t)^2 - 20^2$$

$$h = \sqrt{25t^2 - 400}$$

6. If $f(x) = \frac{3x^2 + x - 10}{x^2 + 2x} = \frac{(3x-5)(x+2)}{x(x+2)} = \frac{3x-5}{x}$

a) Dom: $\mathbb{R} \setminus \{0, -2\}$

b) Vert. asy: $x=0$

H.A. $y=3$

c) Hole @ $x=-2$ $y = \frac{3(-2)-5}{-2} = \frac{-6-5}{-2} = \frac{11}{2}$

$(-2, 11/2)$

