

Blebla

average velocity of an object:  

$$V_{av} = \frac{\text{distance traveled}}{\text{time}}$$
 between  $t=0$  sec and  $t=3$  sec traveled  
 $L(3\text{ sec}) - L(0\text{ sec}) = \text{distance traveled}$   
 $\text{difference in location}$   

$$V_{av} = \frac{71.9\text{ m} - 38.3\text{ m}}{3\text{ sec}} = \frac{33.6\text{ m}}{3\text{ s}} = 11.2\text{ m/s}$$

Aug 30-11:26 AM

$$6x^2 - x^3 + 7x$$

$$-x^3 + 6x^2 + 7x$$

$$-x(x^2 - 6x - 7) \quad (x-3)^2 = x^2 - 6x + 9$$

$$-x(x^2 - 6x + 9 - 9 - 7)$$

$$-x((x-3)^2 - 16)$$

$$-x((x-3)^2 - 4^2)$$

$$-x(x-3+4)(x-3-4) = -x(x+1)(x-7)$$

Aug 30-11:44 AM

$$3x^2 - 12x + 15$$

$$3(x^2 - 4x + 5) \quad (x-2)^2 = x^2 - 4x + 4$$

$$3(x^2 - 4x + 4 - 4 + 5)$$

$$3((x-2)^2 + 1)$$

does not factor

Sum of squares NEVER factors!

Ans:  $3(x^2 - 4x + 5)$

Aug 30-11:59 AM

$$f(x) = 2x - 3 \quad g(x) = x^2 + 5$$

c)  $f(g(2)) = f(9) = 2 \cdot 9 - 3 = 15$

d)  $f(g(0)) = f(5) = 2 \cdot 5 - 3 = 7$

e)  $g(f(3)) = g(2 \cdot 3 - 3) = g(3) = 3^2 + 5 = 14$

Aug 30-12:21 PM