

SEE IF YOU CAN HELP CLAIRE AND DILLON <u>CORRECTLY</u> CALCULATE THE TIME IT WOULD TAKE HIM TO JET UP THE 21-STORY BANK BUILDING AT 6 G'S, USING THE FORMULA DISTANCE = 1/2 X ACCELERATION X TIME SQUARED. THE STEPS IN THE COMIC ARE LISTED ON THE LEFT;

PUT YOUR CORRECTIONS ON THE RIGHT.	
Steps in the Comic	CORRECT STEPS
$200 \text{ ft} = \frac{1}{2} \times 192 \frac{\text{ft}}{\text{sec}^2} \times t^2$	
$200 \text{ ft} = 81 \frac{\text{ft}}{\text{sec}^2} \times t^2$	
200 ft × $\frac{\sec^2}{81 \text{ ft}} = \frac{\sec^2}{81 \text{ ft}} \times \frac{81 \text{ ft}}{\sec^2} \times t^2$	
$\frac{200}{81} \sec^2 = t^2$	
$\sqrt{\frac{200}{81} \sec^2} = \sqrt{t^2}$	
$\frac{\sqrt{100 \times 2}}{\sqrt{81}} \sec = t$	
$t = \frac{10\sqrt{2}}{9} \sec \approx 1.5 \sec \theta$	

LUCKILY, WONDERGUY WAS ABLE TO ADJUST INTUITIVELY AND SAVE THE DAY!

SUPER-TRICKY! IF WONDERGUY FLEW UP AT ONLY 1 G, HOW LONG WOULD IT TAKE? HOW DOES THIS ANSWER RELATE TO THE CORRECT ANSWER?