

The small race! (questions 1 – 5)

Liam rides his bike 4 meters per second. He starts the race 3 seconds late. Let x = time and y = distance.

1. Write an equation for Liam's line. Show algebraic work to show how you found the y intercept.
2. The race is 20 meters long. Write and solve an equation to show how many seconds it will take for Liam to finish the race.

Jessica is also racing. In 5 seconds she has gone 6 meters. After 6 seconds she is at 8 meters.

3. Show an algebraic method to find her rate (slope "m")
4. Write an equation for her line. Show algebraic work to show how you found her y intercept "b."
5. Write and solve an equation to find how many seconds it takes her to finish the 20 meter race?

Finding the line practice problems

6. Find the equation of a line that goes through the point (2,8) and (-5,-13)
7. Find the equation of a line with $m = -\frac{1}{2}$ and goes through the point (6,3)