

SPEED TIME DISTANCE WORD PROBLEMS

- 2012A 16. Three runners start running simultaneously from the same point on a 500-meter circular track. They each run clockwise around the course maintaining constant speeds of 4.4, 4.8, and 5.0 meters per second. The runners stop once they are all together again somewhere on the circular course. How many seconds do the runners run?
- (A) 1,000 (B) 1,250 (C) 2,500 (D) 5,000 (E) 10,000
- 2004A 17. Brenda and Sally run in opposite directions on a circular track, starting at diametrically opposite points. They first meet after Brenda has run 100 meters. They next meet after Sally has run 150 meters past their first meeting point. Each girl runs at a constant speed. What is the length of the track in meters?
- (A) 250 (B) 300 (C) 350 (D) 400 (E) 500
- 2008B 18. Bricklayer Brenda would take 9 hours to build a chimney alone, and bricklayer Brandon would take 10 hours to build it alone. When they work together, they talk a lot, and their combined output is decreased by 10 bricks per hour. Working together, they build the chimney in 5 hours. How many bricks are in the chimney?
- (A) 500 (B) 900 (C) 950 (D) 1000 (E) 1900

- 2009A 20. Andrea and Lauren are 20 kilometers apart. They bike toward one another with Andrea traveling three times as fast as Lauren, and the distance between them decreasing at a rate of 1 kilometer per minute. After 5 minutes, Andrea stops biking because of a flat tire and waits for Lauren. After how many minutes from the time they started to bike does Lauren reach Andrea?
- (A) 20 (B) 30 (C) 55 (D) 65 (E) 80