

Answers to Math Support and Practice

MATH SUPPORT

1. 90 m at 30 s; 20 m at 10 s

$$30 \text{ s} - 10 \text{ s} = 20 \text{ s}$$

$$90 \text{ m} - 20 \text{ m} = 70 \text{ m}$$

$$S = 70 \text{ m} / 20 \text{ s} = 3.5 \text{ m/s}$$

The bicyclist had a speed of 3.5 m/s in the interval between 10 s and 30 s.

2. 90 m at 40 s, 90 m at 30 s

$$40 \text{ s} - 30 \text{ s} = 10 \text{ s}$$

$$90 \text{ m} - 90 \text{ m} = 0 \text{ m}$$

$$S = 0 \text{ m} / 10 \text{ s} = 0 \text{ m/s}$$

The bicyclist was not moving in the interval between 30 and 40 seconds.

MATH PRACTICE

1. $S = 40 \text{ m/s}$
2. $S = 60 \text{ km/hr}$
3. $S = 30 \text{ mi/hr}$
4. $S = 3 \text{ m/s}$
5. $S = 4 \text{ m/s}$
6. $S = 4 \text{ m/s}$
7. between the 1 h to 3 h time interval
8. between the 3 h to 4 h time interval
9. 30 km/h
10. 3 m/s
11. $(40 \text{ mi} + 50 \text{ mi}) / 2 \text{ h} = 45 \text{ mi/h}$
12. $(10 \text{ km} + 0 \text{ km} + 50 \text{ km}) / 4 \text{ h} = 15 \text{ km/h}$