

Bicycle Math

Bicycling is a great way to exercise, save fuel, and help the environment. We can all make the earth a better place by riding bicycles.

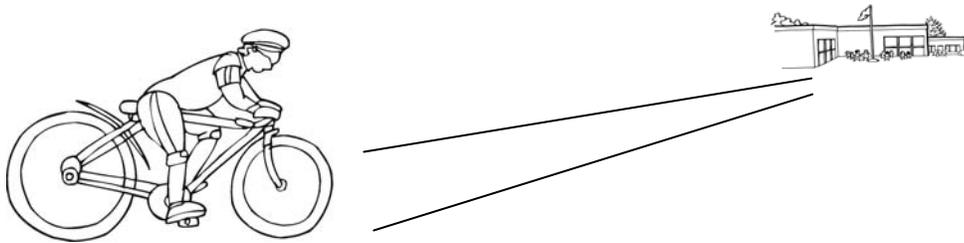
Math facts used for this worksheet:

$$\text{Time} = \text{distance} \div \text{speed}$$

$$1 \text{ Mile} = 5,280 \text{ ft}$$

Use a calculator to solve the problems below.

1. Jim rides his bike 16 miles to school. If Jim's average speed while riding to school is 12 miles per hour, how long will it take him to get to school? _____



2. Sarah's bike travels 8 feet each time her wheels go around one complete revolution. How many times would Sarah's wheels go around to travel 1 mile on her bike? (Hint, there are 5,280 feet in a mile). _____
3. Each time Jill turns the pedals around one complete turn, her bike travels 8 feet. If Jill turned the pedals around 1,980 times, how many feet would she have traveled? _____
4. There are 5,280 feet in 1 mile. Using your answer in problem 3, how many miles did Jill travel when she turned the pedals on her bike 1,980 times? _____
5. If Jill's bike travels 16 feet each time she turns the pedals one complete turn, how many times would she have to turn the pedals to travel 2 miles? _____

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Answer key:

1. Time = distance \div speed (16 miles \div 12 miles per hour = 1.3 hours)
2. $5,280 \text{ ft} \div 8 \text{ ft} = 660$ wheel rotations.
3. $1,980 \times 8 \text{ ft} = 15,840 \text{ ft}$
4. $15,840 \text{ ft} \div 5,280 \text{ ft} = 3$ miles
5. Jill would have turned the pedals 660 times to travel 2 miles if her bike traveled 16 ft each time the pedals were turned. This is calculated by first converting 2 miles into feet: $5280 \text{ ft} \times 2 = 10560 \text{ ft}$. You then divide 16 ft into 10560 ft to determine the number of times Jill needed to turn the pedals to travel 2 miles: $10,560 \text{ ft} \div 16 \text{ ft} = 660$