

Name \_\_\_\_\_

**Solve.**

- 1) A motorcycle traveling at 50 miles per hour overtakes a car traveling at 40 miles per hour that had a three-hour head start. How far from the starting point are the two vehicles?
  
  
  
  
  
  
  
  
  
  
- 2) A motorcycle traveling at 60 miles per hour overtakes a car traveling at 40 miles per hour that had a three-hour head start. How far from the starting point are the two vehicles?
  
  
  
  
  
  
  
  
  
  
- 3) A motorcycle traveling at 50 miles per hour overtakes a car traveling at 30 miles per hour that had a three-hour head start. How far from the starting point are the two vehicles?
  
  
  
  
  
  
  
  
  
  
- 4) Linda and Dave leave simultaneously from the same starting point biking in opposite directions. Linda bikes at 5 miles per hour and Dave bikes at 8 miles per hour. How long will it be until they are 21 miles apart from each other?
  
  
  
  
  
  
  
  
  
  
- 5) Linda and Dave leave simultaneously from the same starting point biking in opposite directions. Linda bikes at 5 miles per hour and Dave bikes at 10 miles per hour. How long will it be until they are 22 miles apart from each other?
  
  
  
  
  
  
  
  
  
  
- 6) Linda and Dave leave simultaneously from the same starting point biking in opposite directions. Linda bikes at 5 miles per hour and Dave bikes at 9 miles per hour. How long will it be until they are 23 miles apart from each other?

- 7) Jeff starts driving at 55 miles per hour from the same point that Lauren starts driving at 40 miles per hour. They drive in opposite directions, and Lauren has a half-hour head start. How long will they be able to talk on their cell phones that have a 480-mile range?
- 8) Jeff starts driving at 75 miles per hour from the same point that Lauren starts driving at 60 miles per hour. They drive in opposite directions, and Lauren has a half-hour head start. How long will they be able to talk on their cell phones that have a 250-mile range?
- 9) Jeff starts driving at 45 miles per hour from the same point that Lauren starts driving at 50 miles per hour. They drive in opposite directions, and Lauren has a half-hour head start. How long will they be able to talk on their cell phones that have a 480-mile range?
- 10) Alexander and Judy are 35 miles apart on a calm lake paddling toward each other. Alexander paddles at 5 miles per hour, while Judy paddles at 8 miles per hour. How long will it take them to meet?
- 11) Alexander and Judy are 26 miles apart on a calm lake paddling toward each other. Alexander paddles at 3 miles per hour, while Judy paddles at 6 miles per hour. How long will it take them to meet?
- 12) Alexander and Judy are 35 miles apart on a calm lake paddling toward each other. Alexander paddles at 3 miles per hour, while Judy paddles at 6 miles per hour. How long will it take them to meet?
- 13) On a road trip, five friends drove at 60 miles per hour to California. On the way home, they took the same route but drove 70 miles per hour. How many miles did they drive on the way to California if the round trip took 10 hours?
- 14) On a road trip, five friends drove at 55 miles per hour to California. On the way home, they took the same route but drove 70 miles per hour. How many miles did they drive on the way to California if the round trip took 10 hours?

- 15) On a road trip, five friends drove at 50 miles per hour to California. On the way home, they took the same route but drove 75 miles per hour. How many miles did they drive on the way to California if the round trip took 10 hours?
- 16) Alexander and Judy are 27 miles apart on a calm lake paddling toward each other. Alexander paddles at 4 miles per hour, while Judy paddles at 7 miles per hour. How long will it take them to meet?
- 17) Linda and Dave leave simultaneously from the same starting point biking in opposite directions. Linda bikes at 7 miles per hour and Dave bikes at 9 miles per hour. How long will it be until they are 23 miles apart from each other?
- 18) A motorcycle traveling at 70 miles per hour overtakes a car traveling at 40 miles per hour that had a three-hour head start. How far from the starting point are the two vehicles?
- 19) Two friends decide to meet in Chicago to attend a Cubs baseball game. Rob travels 176 miles in the same time that Carl travels 144 miles. Rob's trip uses more interstate highways and he can average 8 mph more than Carl. What is Rob's average speed?
- 20) Two friends decide to meet in Chicago to attend a Cubs baseball game. Rob travels 159 miles in the same time that Carl travels 147 miles. Rob's trip uses more interstate highways and he can average 4 mph more than Carl. What is Rob's average speed?
- 21) Two friends decide to meet in Chicago to attend a Cubs baseball game. Rob travels 240 miles in the same time that Carl travels 220 miles. Rob's trip uses more interstate highways and he can average 5 mph more than Carl. What is Rob's average speed?

## Answer Key

Testname: 03.1V03A

- 1) 600 miles
- 2) 360 miles
- 3) 225 miles
- 4) 1.6 hours
- 5) 1.5 hours
- 6) 1.6 hours
- 7) 4.8 hours
- 8) 1.6 hours
- 9) 4.8 hours
- 10) 2.7 hours
- 11) 2.9 hours
- 12) 3.9 hours
- 13) 323.1 miles
- 14) 308 miles
- 15) 300 miles
- 16) 2.5 hours
- 17) 1.4 hours
- 18) 280 miles
- 19) 44 mph
- 20) 53 mph
- 21) 60 mph