Jmath.net

NAME _____ DATE _____

RATE OF MOTION: Worksheet 1

Using $d = rt$, find the following.

1) $r =$

2) $t =$

3) Rate = 35 mph. Time = 4 hours.
Find distance.

4) Time = 3 hours. Distance = 105 miles.
Find rate.

5) Distance = 625 miles. Rate = 50 mph.
Find time.

6) John drove a half hour at 60 mph. What was the distance John traveled?

7) Brandon won a race averaging 80 mph. The race lasted 2.5 hours. How many miles did Brandon drive?

8) Susan flew on American Airlines for 4.5 hours. The trip was 810 miles. What was the average speed of the jet?

9) The Montgomery's went on vacation and traveled by car. They traveled 468 miles and averaged 52 mph. How long did the trip take?

10) Light travels 1,116,000 miles in 6 seconds. What is the speed of light in miles per second?

Jmath.net

KEY
RATE OF MOTION: Worksheet 1

Using $d = rt$, find the following.

1) $r =$ $r = \frac{d}{t}$

2) $t =$ $t = \frac{d}{r}$

3) Rate = 35 mph. Time = 4 hours. Find distance.
$d = rt$ $d = 35 \bullet 4$
$d = 140\,mi$

4) Time = 3 hours. Distance = 105 miles. Find rate.
$r = \frac{d}{t}$ $r = \frac{105}{3}$
$r = 35 mph$

5) Distance = 625 miles. Rate = 50 mph. Find time.
$t = \frac{d}{r}$ $t = \frac{625}{50}$
$t = 12.5 hrs$

6) John drove a half hour at 60 mph. What was the distance John traveled?
$d = rt$ $d = 60 \bullet .5$
$d = 30 mi.$

7) Brandon won a race averaging 80 mph. The race lasted 2.5 hours. How many miles did Brandon drive?
$d = rt$ $d = 80 \bullet 2.5$
$d = 200\,mi.$

8) Susan flew on American Airlines for 4.5 hours. The trip was 810 miles. What was the average speed of the jet?
$r = \frac{d}{t}$ $r = \frac{810}{4.5}$
$r = 180 mph$

9) The Montgomery's went on vacation and traveled by car. They traveled 468 miles and averaged 52 mph. How long did the trip take?
$t = \frac{d}{r}$ $t = \frac{468}{52}$
$t = 9 hrs.$

10) Light travels 1,116,000 miles in 6 seconds. What is the speed of light in miles per second?
$r = \frac{d}{t}$ $r = \frac{1{,}116{,}000}{6}$
$r = 186{,}000 mps$