

NAME _____

DATE _____

RATE OF MOTION: Worksheet 2

Using $d = rt$, find the following.

1) $r =$

2) $t =$

3) Rate = 48 mph. Time = 3 hours.
Find distance.

4) Time = 4 hours. Distance = 144 miles.
Find rate.

5) Distance = 228 miles. Rate = 38 mph.
Find time.

6) John drove 15 minutes at 60 mph. What was the distance John traveled?

7) Brandon won a race averaging 92 mph. The race lasted 3.5 hours. How many miles did Brandon drive?

8) Susan flew on American Airlines for 5 hours. The trip was 775 miles. What was the average speed of the jet?

9) The Montgomery's went on vacation and traveled by car. They traveled 351 miles and averaged 54 mph. How long did the trip take?

10) Light travels 1,488,000 miles in 8 seconds. What is the speed of light in miles per second?

KEY

RATE OF MOTION: Worksheet 2

Using $d = rt$, find the following.

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

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

- 3) Rate = 48 mph. Time = 3 hours.
Find distance.

$$d = rt \quad d = 48 \cdot 3$$

$$d = 144 \text{ mi}$$

- 4) Time = 4 hours. Distance = 144 miles.
Find rate.

$$r = \frac{d}{t} \quad r = \frac{144}{4}$$

$$r = 36 \text{ mph}$$

- 5) Distance = 228 miles. Rate = 38 mph.
Find time.

$$t = \frac{d}{r} \quad t = \frac{228}{38}$$

$$t = 6 \text{ hrs}$$

- 6) John drove 15 minutes at 60 mph. What was the distance John traveled?

$$d = rt \quad 15 \text{ min} = .25 \text{ hr}$$

$$d = 60 \cdot .25$$

$$d = 30 \text{ mi.}$$

- 7) Brandon won a race averaging 92 mph. The race lasted 3.5 hours. How many miles did Brandon drive?

$$d = rt \quad d = 92 \cdot 3.5$$

$$d = 322 \text{ mi.}$$

- 8) Susan flew on American Airlines for 5 hours. The trip was 775 miles. What was the average speed of the jet?

$$r = \frac{d}{t} \quad r = \frac{775}{5}$$

$$r = 155 \text{ mph}$$

- 9) The Montgomery's went on vacation and traveled by car. They traveled 351 miles and averaged 54 mph. How long did the trip take?

$$t = \frac{d}{r} \quad t = \frac{351}{54}$$

$$t = 6.5 \text{ hrs.}$$

- 10) Light travels 1,488,000 miles in 8 seconds. What is the speed of light in miles per second?

$$r = \frac{d}{t} \quad r = \frac{1,488,000}{8}$$

$$r = 186,000 \text{ mps}$$