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NAME _____

DATE _____

RATE OF MOTION: Worksheet 4

Using d = rt, find the following.

1) *r* =

2) *t* =

- 3) Rate = 36 mph. Time = 2.75 hours. Find distance.
- 4) Time = 3.2 hours. Distance = 144 miles. Find rate.
- 5) Distance = 165 miles. Rate = 33 mph. Find time.
- 6) John drove 2.8 hours at 60 mph. What was the distance John traveled?
- 7) Brandon won a race averaging 120 mph. The race lasted 3.2 hours. How many miles did Brandon drive?
- 8) Susan flew on American Airlines for 3.5 hours. The trip was 1680 miles. What was the average speed of the jet?
- 9) The Montgomery's went on vacation and traveled by car. They traveled 440 miles and averaged 55 mph. How long did the trip take?
- 10) Bill ran 120 yards in 16 seconds. What was Bill's speed in yards per second?

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KEY **RATE OF MOTION: Worksheet 4**

Using d = rt, find the following.

r

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

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

- 3) Rate = 36 mph. Time = 2.75 hours. d = rt $d = 36 \bullet 2.75$ Find distance. d = 99mi
- $r = \frac{d}{t} \qquad r = \frac{144}{3.2}$ Time = 3.2 hours. Distance = 144 miles. 4) Find rate. r = 45mph

5) Distance = 165 miles. Rate = 33 mph.
$$t = \frac{d}{r}$$
 $t = \frac{165}{33}$
Find time. $t = 5hrs$

- $d = 60 \bullet 2.8$ d = rtJohn drove 2.8 hours at 60 mph. What was the distance John traveled? 6) d = 168mi.
- 7) Brandon won a race averaging 120 mph. The race lasted 3.2 hours. How many miles did Brandon drive?

$$d = rt \qquad d = 120 \bullet 3.2$$
$$d = 384mi.$$

Susan flew on American Airlines for 3.5 hours. The trip was 1680 miles. What was the average speed of 8) the jet? r =

$$= \frac{d}{t} \qquad r = \frac{1680}{3.5}$$
$$r = 480mph$$

The Montgomery's went on vacation and traveled by car. They traveled 440 miles and averaged 55 mph. 9) How long did the trip take?

$$t = \frac{d}{r} \qquad t = \frac{440}{55}$$
$$t = 8hrs.$$

10) Bill ran 120 yards in 16 seconds. What was Bill's speed in yards per second?

$$r = \frac{d}{t} \qquad r = \frac{120}{16}$$
$$r = 7.5 \, yps$$