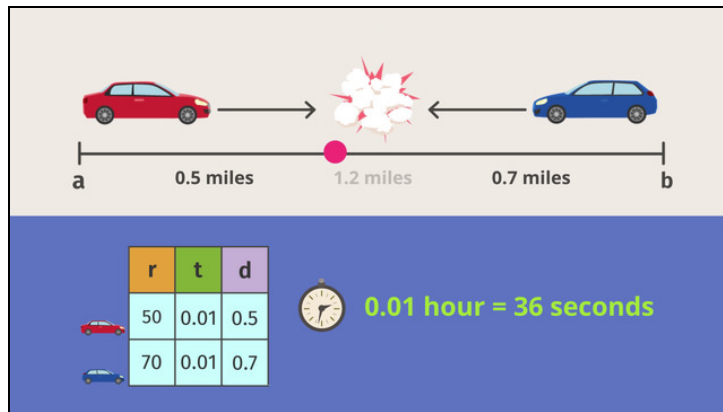




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

## Distance - Rate - Time - Different Directions



- 1 Summarize the distance, rate, and time problem.
  - 2 Determine when and where the car will crash.
  - 3 Calculate the rate at which the car travels.
  - 4 Evaluate the time, if the rate changes.
  - 5 Find out when and where the two brothers will meet.
  - 6 Determine when Jim has to leave his home to make it to his appointments on time.
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.

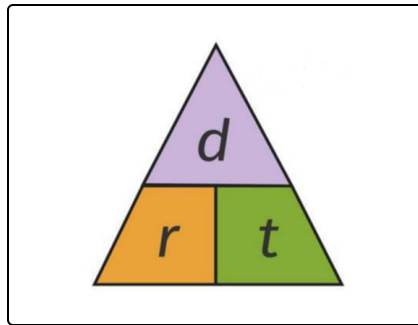


The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



## Summarize the distance, rate, and time problem.

Match the parts of the sentences.



The variable  $t$  represents ...

A

You can calculate the time with the equation ...

B

The variable  $d$  stands for ...

C

For a known rate and time, you can determine the distance by using the equation ...

D

1 ...  $d = r \times t$

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

3 ...  $t = \frac{d}{r}$

4 ... the rate.

5 ... the time.

6 ... the distance.

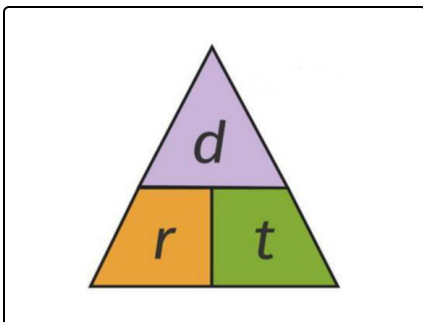


## Hints for solving these problems

1  
of 6

### Summarize the distance, rate, and time problem.

#### Hint #1



Use the magic triangle:

- $d$  over  $r$  as well as  $d$  over  $t$
- $r$  and  $t$  on the same level

---

#### Hint #2

Remember what the variables stand for:

- Distance
  - Rate
  - Time
-

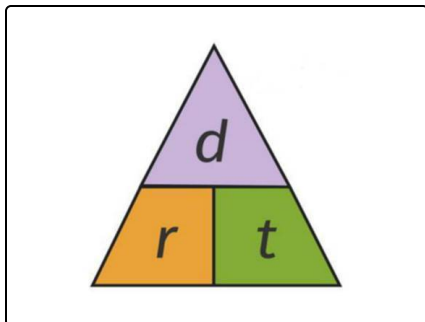


## Answers and detailed answer explanations for these problems

1  
of 6

### Summarize the distance, rate, and time problem.

Answer key: A—5 // B—3 // C—6 // D—1



To solve problems, use the **Distance Rate Time triangle**.

- Distance
- Rate
- Time

Starting at the top, if we want to calculate distance,  $d$ , we can see that  $r$  and  $t$  are on the same level. So our equation is modified:

$d = r \times t$ . To calculate the rate,  $r$ , we look at the other two variables,  $d$  and  $t$ .  $d$  stands over  $t$  in the triangle, so we have  $r = \frac{d}{t}$ . To find time,  $t$ , we notice that  $d$  is over  $r$ , so our final

equation is:  $t = \frac{d}{r}$ .