CANDLELIGHT DINNER

Will Attorney Matherstone make it home in time?

It is Grace Matherstone's birthday. Her busy husband, Attorney Matherstone, calls to tell her that he has to work late, as he often does, even on special occasions. He tells her he has 2 briefs to review. Grace makes her husband the same deal she made him on their anniversary. If he makes it home before the candle burns out, they can celebrate together. If not, he will be sleeping outside with their dog, Roger.

Look at the text message exchange between Grace and her husband.

Determine whether Attorney Matherstone will make it home before the candle burns out.

7.RP.A.1

About this standard

Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles an hour.*

Attorney Matherstone
WILL / WILL NOT
make it home before the candle burns out.

APPLYING THE STANDARD
Here is how similar problems might look on a test.

For problems 1-3, calculate the unit rate.

1) $\dfrac{\frac{1}{2} \text{ tsp salt}}{\frac{1}{8} \text{ tsp garlic}}$

2) $\dfrac{270 \text{ miles}}{4\frac{1}{2} \text{ hours}}$

3) $\dfrac{\$9.50}{9 \text{ yards}}$

4) Cookie dough can be purchased in tubs or rolls. A 32-ounce tub cost $4.56 and a 16.5-ounce roll costs $2.50. Which is the better buy, per ounce?

5) One lap around a school track is $\frac{2}{5}$ kilometer. Camila runs 3 laps in 5 minutes. What is her running rate in kilometers per minute?

6) There are three competitors in the County Fair Pie-Eating contest - Sharon, Buck, and Reggie. Rank the three competitors in order of their eating rate - fastest to slowest.

Sharon: $\frac{1}{6}$ pie in $\frac{1}{2}$ minute

Buck: $\frac{1}{5}$ pie in $\frac{2}{5}$ minute

Reggie: $\frac{1}{8}$ pie in $\frac{3}{4}$ minute

	Competitor
Fastest	
↓	
Slowest	

Durango & Silverton Narrowgauge Train

The D&S Narrowgauge Train can travel $\frac{1}{5}$ of the distance between Durango, CO and Silverton, CO in $\frac{7}{10}$ of an hour.

At this rate, how many hours will it take to travel the entire distance between these two towns?

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