Tennessee Comprehensive Assessment Program / Mathematics
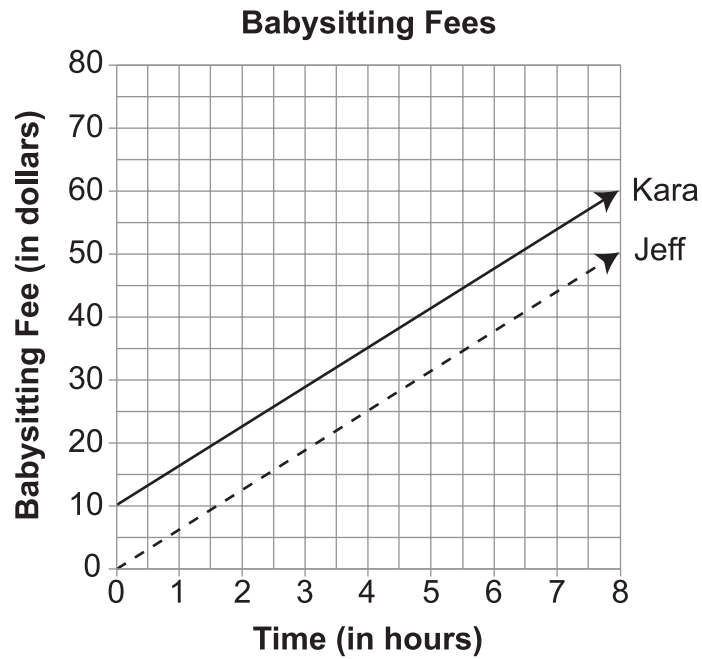
TCAP/CRA
2012-2013

Task 4: Babysitting Fees Task
Full Scoring Guide

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.
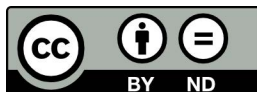
Babysitting Fees

a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

STOP

4. Babysitting Fees Task Scoring Guide

The CCSS for Mathematical Content (2 points)

7.RP.2b   The student identifies an appropriate unit rate for each line on the graph. The _____
student may do this by:

- using the data from the graph and dividing Jeff's fee by the hours he babysat and Kara's fee minus the initial $10 at 0 hours by the hours she babysat.

- using the data from the graph to write equations for each line (Jeff as $y = 6.25x$ and Kara as $y = 6.25x + 10$) and identifying the coefficient of x as the constant rate.

- counting and determining rise/run.

- calculating the slope of each line by choosing 2 points on the line and applying any form of the slope (m) formula $\dfrac{y_2 - y_1}{x_2 - x_1}$.

7.RP.2a   The student demonstrates understanding of proportionality by showing that Kara's _____
line does not represent a proportional relationship. The student may do this by:

- identifying that both are straight lines but only Jeff's line passes through the origin.

- identifying that both are straight lines but only Jeff's line graphs the unit rate of $6.25 at 1 hour.

- dividing the fee by the hours for any given point on Jeff's line, and indicating that the quotient is constant and is the unit rate; dividing the fee by the hours for Kara's line, and indicating that the quotient is not constant.

- creating a table and/or forming ratios from the data and recognizing that Jeff's data contain equivalent ratios, while Kara's data do not.

Total Content Points _____

The CCSS for Mathematical Practice (4 points)

MP1   The student provides a strategy for finding the unit rate and indicates that Jeff is   _____
       correct and demonstrates understanding of proportionality in responding to Part B.

       (MP1: Make sense of problems and persevere in solving them.)

MP3   The student indicates that Jeff is correct and provides evidence that Kara's data   _____
       does not represent a proportional relationship, or constructs a viable argument
       supporting the reasoning used in finding the unit rates in Part A.

       (MP3: Construct viable arguments and critique the reasoning of others.)

MP6   The student correctly determines a reasonable rate (6.0–6.5) per hour, uses   _____
       appropriate labels (e.g., 4 hours, $35), indicates Jeff is correct and carefully and
       precisely indicates sufficient reasoning to show that Kara's line does not represent a
       proportional relationship. All work shown is correct.

       (MP6: Attend to precision.)

MP7   The student provides work indicating understanding of both unit rate and the   _____
       structure of proportional relationships. No misunderstanding about the structure of
       proportional relationships is shown in the response.

       (MP7: Look for and make use of structure.)

Total Practice Points _____

Total Awarded Points _____

The CCSS for Mathematical Content Addressed in This Task

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Recognize and represent proportional relationships between quantities.

7.RP.2a   Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

7.RP.2b   Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

The CCSS for Mathematical Practice*

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

*Gray text indicates Mathematical Practices that are not addressed in this task.

Students' responses to a mathematical task provide evidence of what they understand and are able to do in relation to the standards and practices. Across tasks, this cumulative evidence shows students' understanding and abilities within a domain. When students do not respond completely to all parts of a task, they provide insufficient evidence of their mathematical understanding and abilities and therefore do not fully demonstrate the expectations of the standards and practices aligned with that task.

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
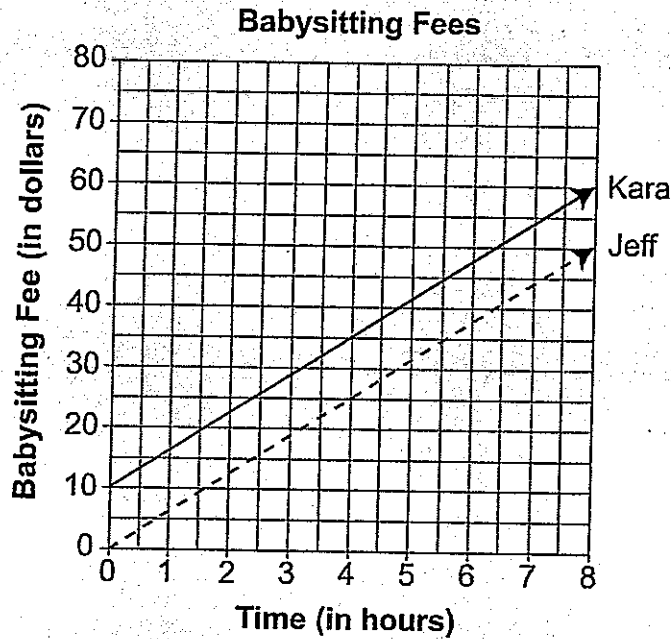
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

They both get $6.25 an hour.

Kara is correct.

6.25
4)25.00
-24
10
-8
20
-20

Litho#: 7541

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff is correct because Kara's relationship does not go through the origin. Jeff's relationship is the only one that goes through the origin. If both of the relationships were proportional they would have went through the origin which is (0,0).

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Page 11

Guide 1   Litho 7541

Total Content Points: 2   (7.RP.2a, 7.RP.2b)

Total Practice Points: 3   (MP1, MP3, MP7)

The student identifies an appropriate unit rate of $6.25 an hour for Kara and Jeff by using the data within the graph and dividing the fee (25) by the hours (4) to get $6.25 in Part A (7.RP.2b). However, work supporting both calculations is not shown, and thus the student fails to demonstrate sufficient attention to precision (no credit for MP6). The student indicates that Jeff is correct and provides evidence that Kara's data do not represent a proportional relationship by stating in Part B that Kara's line does not go through the origin ("Jeff's relationship is the only one that goes through the origin") (7.RP.2a), and for both to be proportional, both would have to go through the origin (the student does not have to state that the lines need to be straight lines through the origin due to the obvious straight lines on the graph) (MP3). The student shows understanding of the structure of proportional relationships by acknowledging that proportional lines go through the origin in Part B (MP7). The student makes sense of the problem and perseveres in solving it by providing a strategy for finding the unit rate; the student also indicates that Jeff is correct and, in their response to Part B, demonstrates an understanding of proportionality (MP1).

Total Awarded Points: 5 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
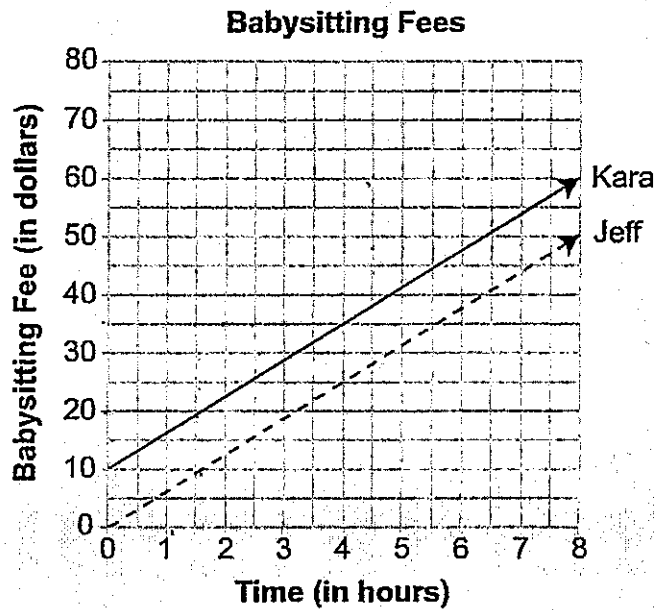
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

> She is right, the lines are parallel and they both recieve $6.25 an hour
>
> $$\frac{50}{8} = 6.25 \qquad 60-10 = \frac{50}{8} = 6.25$$

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff is right, They go up the same, but Jeff starts at $10.

Kara	
hrs.	$
1	6.75
2	12.5
5	31.75
10	62.5
15	93.25

Jeff	
hrs.	$
1	16.75
2	22.5
3	41.75
10	82.5
15	103.25

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Page 11

Guide 2   Litho 11951

Total Content Points: 1   (7.RP.2b)

Total Practice Points: 2   (MP3, MP7)

The student identifies an appropriate unit rate of $6.25 an hour for both Kara and Jeff by using the data within the graph, and divides Jeff's fee (50) by his hours (8) and Kara's fee ($60 minus the $10 at 0 hours) by her hours (8) in Part A (7.RP.2b). Thus, a viable argument for determining the unit rate is constructed in Part A (MP3). The student provides work indicating an understanding of unit rate in Part A (MP7). Although the student indicates that Jeff is correct in Part B, the work incorrectly shows Jeff's line starting at $10, thus indicating a lack of precision (no credit for MP6). The table of data points the student uses does not determine if Kara's or Jeff's ratios would be equivalent or not, which is an appropriate test for proportionality (no credit for 7.RP.2a). The student does not use correct mathematical reasoning for proportionality in Part B and fails to determine that Kara's line is not proportional, thereby indicating a lack of making sense of all parts of the task and perseverance in solving them (no credit for MP1).

Total Awarded Points: 3 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
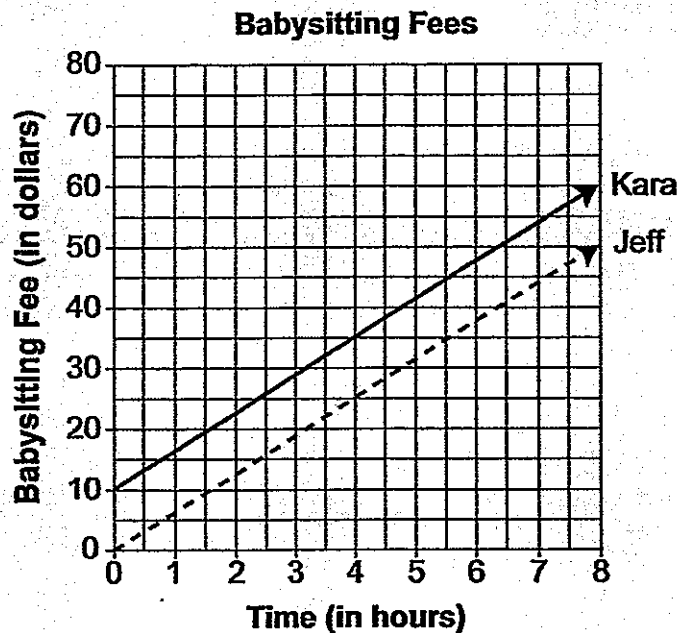
a.   Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

> Kara started at $10 for 0 hours; Jeff started off at $0 for 0 hours. Kara is not correct; they don't make the same amount per hour. Kara is approximately $10 ahead of Jeff each hour.

Page 10   GO ON TO THE NEXT PAGE.

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Kara = (0, 10)

Jeff = (0, 0)

Jeff is correct because all proportional relationships begin at (0,0).

hours	Jeff	Kara
0	0	10
1	6	16
2	13	23
3	19	29
4	25	35
5	31	41
6		
7		
8		

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Guide 3   Litho 7585

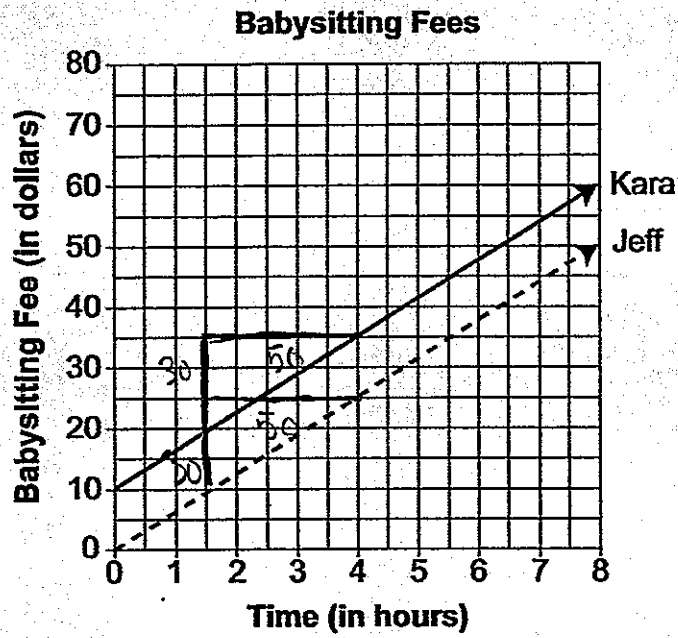Total Content Points: 1   (7.RP.2a)

Total Practice Points: 2   (MP3, MP7))

The student does not identify an appropriate unit rate for Kara or Jeff in Part A (no credit for 7.RP.2b). The student's insufficient work for a correct calculation of the unit rate indicates a lack of precision (no credit for MP6). The student demonstrates understanding of proportionality in Part B by identifying that Kara's line does not go through the origin but Jeff's line does, while noting that "all proportional relationships begin at (0, 0)" (7.RP.2a). The student indicates that Jeff is correct and that Kara's line is not proportional because her line starts at (0, 10) and not (0, 0) (MP3), demonstrating a knowledge of the structure of proportional relationships by understanding that proportional lines must go through the origin (MP7). The student does not determine an appropriate unit rate for Kara and Jeff in Part A, thereby not making sense of all parts of the task or persevering in solving them (no credit for MP1).

Total Awarded Points: 3 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees

a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

$$Kara = \frac{30}{50} = \frac{3}{5}$$

$$Jeff = \frac{30}{50} = \frac{3}{5}$$

Kara is correct!

Page 10   **GO ON TO THE NEXT PAGE.** ➡

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

I agree with Jeff because Kara's line doesn't start at (0,0). Therefore, it isn't proportional. Jeff's is though.

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Guide 4   Litho 7571
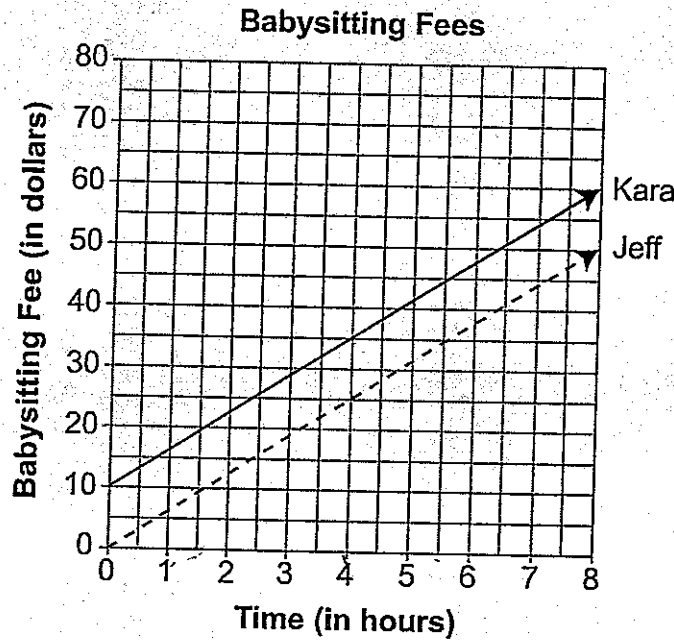
Total Content Points: 1   (7.RP.2a)

Total Practice Points: 2   (MP3, MP7)

The student's calculation of $\frac{3}{5}$ for both Kara and Jeff does not correctly identify an appropriate unit rate for Kara and Jeff in Part A (no credit for 7.RP.2b), indicating a lack of precision in determining the unit rate (no credit for MP6). The student demonstrates understanding of proportionality in Part B by noting that Kara's line is not proportional because it does not begin at (0, 0), but Jeff's line is proportional because it does (7.RP.2a). The student agrees that Jeff is correct and provides evidence that Kara's line is not proportional ("Kara's line doesn't start at (0, 0)") (MP3), indicating a knowledge of the structure of proportional relationships by understanding that proportional lines must go through the origin (MP7). The student does not determine an appropriate unit rate for Kara and Jeff in Part A, thereby not making sense of all parts of the task or persevering in solving them (no credit for MP1).

Total Awarded Points: 3 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees

a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

Kara
1.4 hours
$35

Jeff
4 hours
$25

Kara gets $8.75 per hour. Jeff gets $6.25 per hour. They charge the same per hour but Kara gets $10 as soon as she walks in the door.

Page 10   GO ON TO THE NEXT PAGE. ➡

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

they are not proportional because

Kara charges $10 before she even starts babysitting. Kara's line does not go through the orgian. So it is not proportional. Jeff is correct.

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Page 11

Guide 5   Litho 7555

Total Content Points: 1   (7.RP.2a)

Total Practice Points: 2   (MP3, MP7)

The student does not identify an appropriate unit rate for both Kara and Jeff in Part A; even though Jeff's rate of $6.25 an hour is correct, Kara's rate of $8.75 an hour is incorrect (no credit for 7.RP.2b). This inaccuracy indicates a lack of precision (no credit for MP6). The student demonstrates understanding proportionality in Part B by stating that "Kara's line does not go through the orgian. So it is not proportional" (7.RP.2a). In addition to providing this evidence, the student states Jeff is correct (MP3). The student indicates knowledge of the structure of proportional relationships by understanding that proportional lines must go through the origin (MP7). The student does not identify an appropriate unit rate for Kara in Part A, thereby not making sense of all parts of the task or persevering in solving them (no credit for MP1).

Total Awarded Points: 3 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
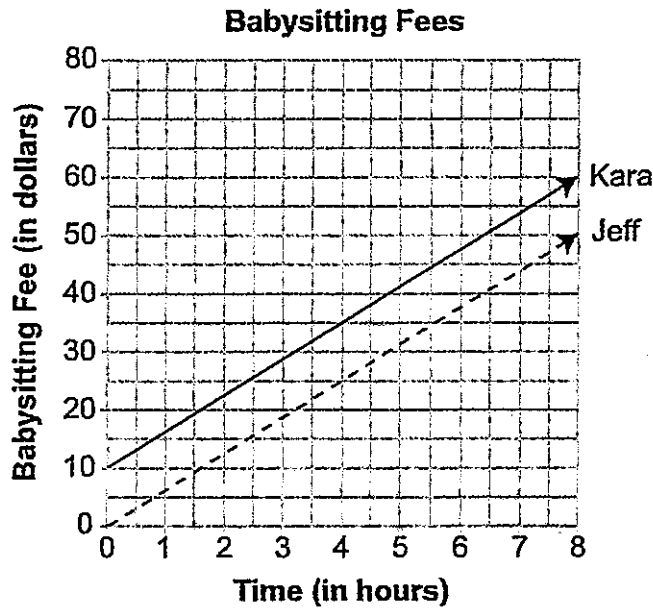
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

Kara is correct because for 2 hrs and a half they are both paid 15 dollars and in the end the slope of the line went up 50 sho Kara is correct for saying they are cunged the same per hour.

Page 10   GO ON TO THE NEXT PAGE. ➡️

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff is correct because Kara charges 10 dollars even before they start working. So the graph would not be proportial.

For it to be proportional everything should be evened out

x		5	7	
y		25	40	45

$$\frac{10}{0} = 0 \qquad \frac{5}{25} = 10$$

$$0 \neq 10$$

0 does not equal 10.

STOP

REVIEW YOUR WORK IF YOU HAVE TIME.

Guide 6   Litho 11956

Total Content Points: 1   (7.RP.2a)

Total Practice Points: 2   (MP3, MP7)

The student does not identify an appropriate unit rate for Kara and Jeff in Part A despite stating that "for 2 hrs and a halp [half] they are both paid 15 dollars" (a rate of $6 per hour). Between not identifying the unit rate as $6 per hour, and then further stating, "the slope of the line went up 50," the student indicates a lack of understanding of unit rate (no credit for 7.RP.2b). The student's unclear determination of unit rate indicates a lack of precision (no credit for MP6). Although the student's work uses an incorrect ratio of $\frac{10}{0} = 0$ in Part B, the student demonstrates understanding of proportionality by attempting to use 2 points on the graph ((0, 10) and (2.5, 25)) to check for equal ratios and thus constant slope (7.RP.2a). The student states that Jeff is correct and provides evidence that Kara's line is not proportional by determining that her line does not have a constant slope and "For it to be proportional everything should be evened out" (MP3). The student indicates knowledge of the structure of proportional relationships by understanding that a proportional line must have a constant slope (MP7). The student's lack of clearly determining the unit rate in Part A indicates that the student does not make sense of all parts of the problem or persevere in solving them (no credit for MP1).

Total Awarded Points: 3 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
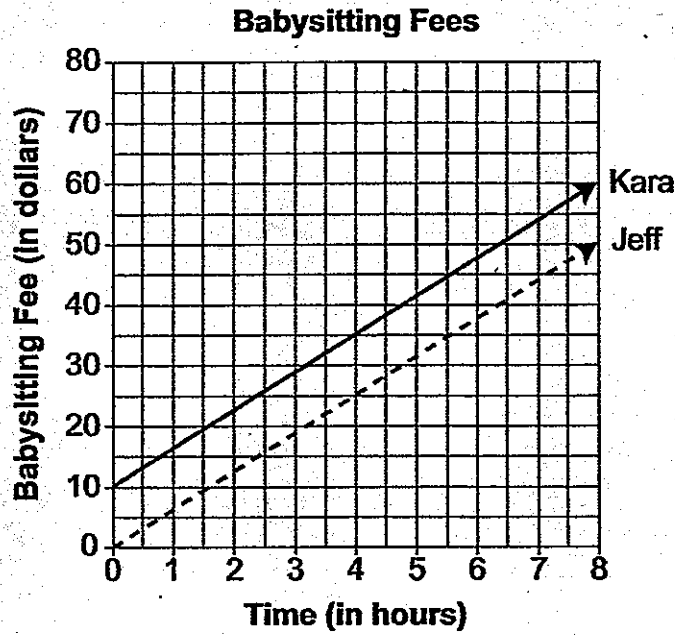
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

They both earn $6. a hour but Kara gets paid at start and Jeff doesnt his fees. are paid after he works

b.   Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff because Kara gets $10 +
hours worked in mony

$10 + hm

hour mony

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Guide 7   Litho 7561

Total Content Points: 1   (7.RP.2b)

Total Practice Points: 0

The student identifies an appropriate unit rate of $6 an hour for both Kara and Jeff in Part A (7.RP.2b). However, work supporting a calculation is not shown, and thus the student does not show sufficient attention to precision (no credit for MP6). By not determining that Kara's line is not proportional in Part B, the student demonstrates a lack of understanding of proportionality (no credit for 7.RP.2a). The student indicates that Jeff is correct but does not provide evidence that Kara's data does not represent a proportional relationship in Part B; nor does the student construct a viable argument determining a unit rate in Part A (no credit for MP3). The student does not show an understanding of unit rate in Part A, as despite having a rate there is no work to show how it was determined; nor does the student demonstrate an understanding of the structure of proportional relationships, as there is no statement that Kara's line is not proportional (no credit for MP7). The student's lack of clearly determining whether Kara's line is proportional or not in Part B indicates that the student does not make sense of all parts of the task or persevere in solving them (no credit for MP1).

Total Awarded Points: 1 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
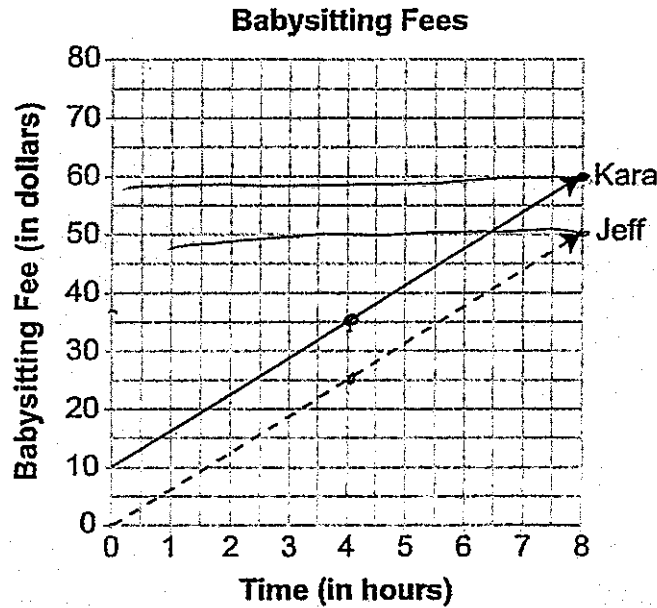
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

$$Jeff - \frac{10 \text{ dollars}}{0 \text{ hours}} = 0$$

$$\frac{25 \text{ dollars}}{4 \text{ hours}} = \frac{\$6.25}{1 \text{ hour}}$$

$$\frac{50 \text{ dollars}}{8 \text{ hours}} = \frac{\$6.25}{1 \text{ hour}}$$

$$Kara - \frac{20 \text{ dollars}}{0 \text{ hours}} = \frac{\$20}{1 \text{ hour}}$$

$$\frac{35 \text{ dollars}}{4 \text{ hours}} = \frac{\$8.75}{1 \text{ hour}}$$

$$\frac{60 \text{ dollars}}{8 \text{ hours}} = \frac{\$7.5}{1 \text{ hour}}$$

Jeff has a unit rate of $6.25 per hour.

Kara charges $20 in zero hours, $8.75 in 4 hours, and $60 in 8 hours. Jeff and Kara don't charge the same amount per hour. Jeff charges at a constant rate, Kara doesn't

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff is correct. Kara doesn't have a constant rate of change but Jeff does. The lines on the graph are parallel but Kara doesn't start at zero.

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Page 11

Guide 8 Litho 11965

Total Content Points: 0

Total Practice Points: 1 (MP7)

The student identifies an appropriate unit rate of $6.25 an hour for Jeff in Part A, but the unit rate for Kara is incorrect (no credit for 7.RP.2b). The student's incorrect determination of Kara's unit rate indicates a lack of precision (no credit for MP6). The student does not demonstrate an understanding of proportionality in Part B since there is no determination that Kara's line is not proportional, only the insufficient statement that "Kara doesn't start at zero," (no credit for 7.RP.2a). The student indicates that Jeff is correct but does not provide evidence that Kara's data does not represent a proportional relationship in Part B or construct a viable argument determining a unit rate for Kara in Part A (no credit for MP3). The student does show some understanding of unit rate in Part A for Jeff's work by showing that Jeff has a constant rate of $6.25 for 2 selected data points on the graph, and some understanding of the structure of proportional relationships in Part B by noting that Kara's line does not start at zero (MP7). Because the student does not correctly determine Kara's unit rate in Part A, and does not determine whether Kara's line is proportional or not in Part B, making sense of all parts of the task and persevering in solving them is not demonstrated (no credit for MP1).

Total Awarded Points: 1 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
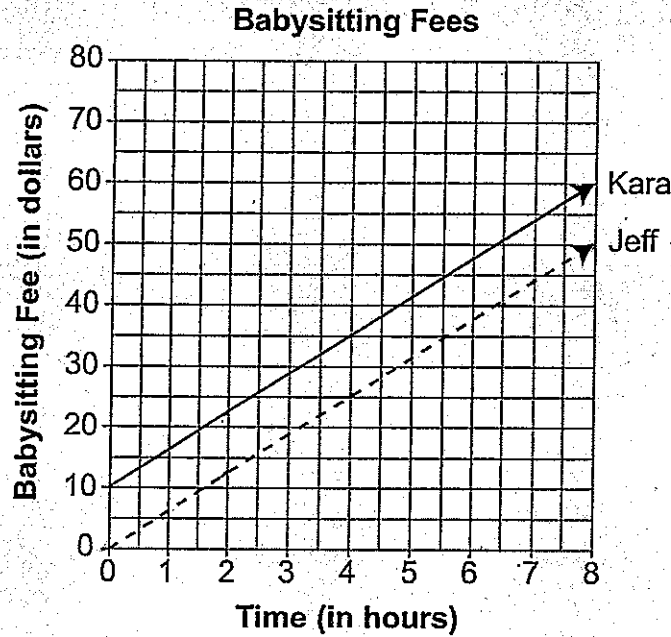
a.   Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

Kara is correct because when you look at the graph you can see that they are both increasing the same amount each our they are babysitting.

$$\frac{4}{35} = \text{Kara's}$$ hours ↑   money ↓

$$\text{Jeff} = \frac{8}{50}$$ → hours   → money

They do charge the same amount

They are both staying at a steady incline and going up the same amount

Page 10   GO ON TO THE NEXT PAGE.

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Jeff is correct.

$$\frac{200}{\text{hours} \quad 4} \times \frac{280}{\text{money} \quad 35} \times \frac{8 \rightarrow \text{hours}}{50 - \text{money}}_{\text{earned.}}$$

Kara   Jeff

Jeffs will go through the origin, but Kara will not so they are not proportional. So after you work it out Jeff is correct.

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Guide 9   Litho 7551

Total Content Points: 0

Total Practice Points: 0

The student does not identify an appropriate unit rate for Kara and Jeff in Part A, as
even though the calculation for Jeff's rate is on the correct path using 8 and 50 as data
points, the student does not determine a unit rate (no credit for 7.RP.2b). The limited
clarity in the explanation provided in Part B indicates a lack of precision (no credit for
MP6). Although the student indicates in Part B that Jeff's line will go through the origin
and Kara's will not, the work shown (cross-multiplying a data point for Kara and a data
point for Jeff) and the explanation provided leaves it unclear whether the student is
comparing Jeff's and Kara's graphs as proportional to each other or whether Kara's line
is not proportional (no credit for 7.RP.2a). The student indicates that Jeff is correct, but
does not provide evidence that Kara's data does not represent a proportional
relationship in Part B or construct a viable argument determining a unit rate in Part A (no
credit for MP3). The student does not show understanding of unit rate in Part A, and the
student's understanding of proportional relationships in Part B is unclear (no credit for
MP7). The student's lack of correctly determining unit rate in Part A and lack of
determining whether Kara's line is proportional or not in Part B indicates that the student
does not make sense of all parts of the problem or persevere in solving them (no credit
for MP1).

Total Awarded Points: 0 out of 6

Task 4. Babysitting Fees Task

Jeff and Kara graphed the relationship of their babysitting fees over time on the same graph.

Babysitting Fees
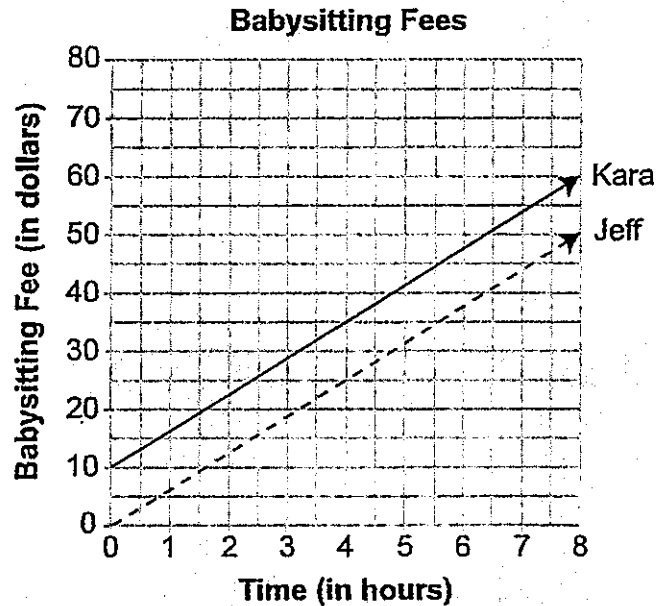
a. Kara claims that she and Jeff charge the same amount per hour. Use the graph to determine the unit rate per hour for both Kara and Jeff. Show work to support that Kara is correct.

> They Both Do charge the same, cause the Lines on the Graph are parrallell, but Kara charges a $10 Fee, just for coming.

Page 10   GO ON TO THE NEXT PAGE. ➡

b. Because they charge the same rate per hour, Kara also claims that the relationships represented by each of the graphs are proportional. Jeff disagrees. Use mathematical reasoning to explain who is correct and why.

Kara is right, cause the 2 lines on the Graph are Parrallell,

STOP

REVIEW YOUR
WORK IF YOU
HAVE TIME.

Page 11

Guide 10   Litho 11946

Total Content Points: 0

Total Practice Points: 0

The student does not attempt to calculate or identify an appropriate unit rate for Kara and Jeff in Part A, as stating the lines are parallel is an incorrect process for determining a unit rate (no credit for 7.RP.2b). The lack of determining a unit rate for Kara and Jeff indicates a lack of precision (no credit for MP6). By stating Kara is right and by not stating Kara's line is not proportional in Part B, the student does not demonstrate an understanding of proportionality (no credit for 7.RP.2a). The student does not indicate that Jeff is correct or provide evidence that Kara's data does not represent a proportional relationship in Part B; nor is a viable argument constructed in Part A for determining a unit rate (no credit for MP3). The student does not show an understanding of unit rate in Part A or of the structure of proportional relationships in Part B (no credit for MP7). The student's lack of determining a unit rate in Part A and lack of determining whether Kara's line is proportional or not in Part B indicates that the student does not make sense of all parts of the problem or persevere in solving them (no credit for MP1).

Total Awarded Points: 0 out of 6