1. Consider the proportion, $\frac{3}{4} = \frac{a}{24}$. What is the value of a in the proportion.

   c   18

2. A small case of pop, with 12 cans, costs $3.96. A large case has 18 cans. The cost per can in the large case is $0.02 less than in the small case.
   What is the cost of a large case?

   c $5.58

3. Which of the following ratios is equivalent to 2:5?

   c   14:35

4. In an election for student council president, 480 students vote.
   Jade receives 55% of the votes. Erika receives the rest of the votes.
   How many votes does Erika receive?
   a   216

5. Road Trip!
   Paul drives from home to his friend's house and then back home.
   - The distance from Paul's home to his friend's house is about 720 km.
   - On average Paul's car uses 6.8 L of gas for every 100 km.
   - Gas costs 96.5 cents a litre.

   How much does Paul pay in total for gas to his friend's house and back home?
   Show your work.   (720/100)(6.8)(0.965) = $472.46

6. In the first year of a fundraising campaign, donations are collected at a rate of $700 each day for 8 days.
   In the second year, the daily rate doubles and the campaign is 3 days longer.
   How much money is raised in the second year? $1400(11) =

   d $15 400

7. Billy has 3 apples and 4 oranges. Which of the following has a ratio of apples to oranges equivalent to Billy's?   d   9 apples and 12 oranges

8. The ratio of the width to the height of a television screen is 16:9.
   If the height of the screen is 52 cm, which is closest to the width?
   a   92 cm

9. Each year, a school sends 50 students to a conference. Last year, the cost was $12.50 per student. This year, the cost per student has increased by 16%. What is the total cost to send 50 students to the conference this year?

   c $725

10. ***Orange-Gi***
    Gina is buying 24 oranges.
    Two stores offer the following deals:
    <u>Store A</u>: 12 oranges for $6.48   <u>Store B</u>: 5 oranges for $2.65
    Gina can buy oranges individually. How much will Gina save if she buys 24 oranges at Store B?
    Show your work.
    $6.48(2) - ($2.65/5)(24) = $12.96 - $0.53(24) = $0.24   Therefore, she would save 24 cents.
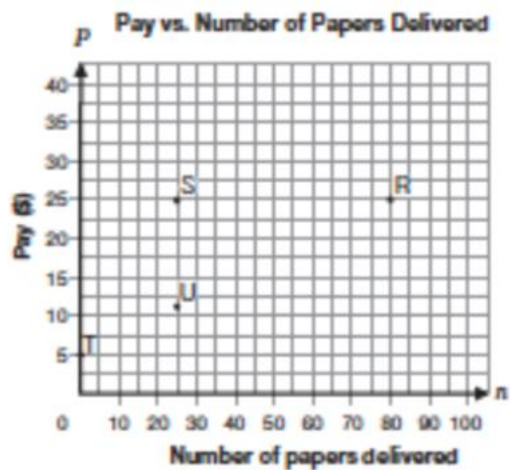
11. ***Student Work*** Cam, Beth and Amrit are paid at an hourly rate for their time worked. The graph below shows the amount paid and the time worked for these three students.

Pay vs. Amount of Time Worked
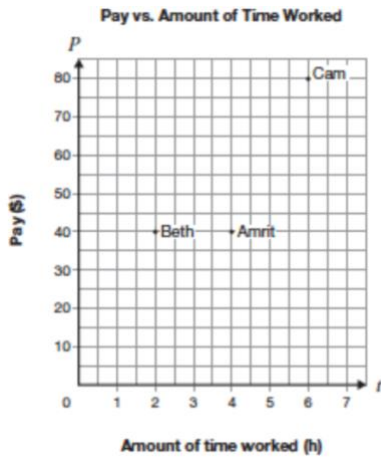
Determine which student is paid the highest hourly rate. Justify your answer.

The student who is paid the highest hourly rate is <u>Beth she is paid $20/hr (Direct variation so the joining origin to Beth's point is steeper meaning her rate is greater)</u>
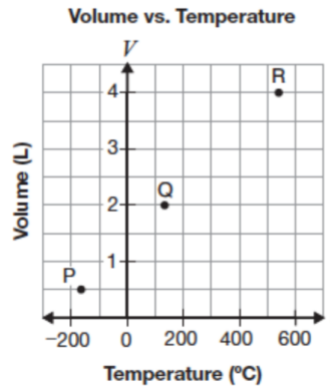
12. Information about the volume of a particular gas and its temperature is shown on the graph.

Volume vs. Temperature

Whish of the following is true about the information represented in this graph?

~~a The volume of the gas is less at R than at P~~

~~b The volume of the gas is greater at Q than at R.~~

c   The temperature of the gas is lower at P than at Q.

~~d The temperature of the gas is higher at Q than at R.~~

13. Mia delivers the local newspaper. Her base pay is $5 per week, and she gets $0.25 per paper.

Pay vs. Number of Papers Delivered

Which of the points on the graph represents Mia's pay for delivering 25 newspapers in a week? 6.25+5=11.25

~~a)   Point R~~
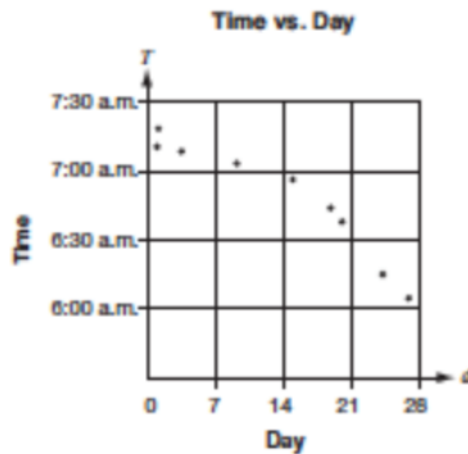
~~b)   Point S~~

~~c)   Point T~~

d)   Point U

14. Yves records the time of day that a street light turns off for 9 mornings over 28 days. The graph shows his data from the first day of the month.

Time vs. Day

Which statement describes the relation above?

~~a)   The later in the month, the later the street light turns off.~~

b)   The later in the month, the earlier the street light turns off.

~~c)   The earlier in the month, the earlier the street light turns off.~~

~~d)   There is no relationship between the day and the time the street light turns off.~~