

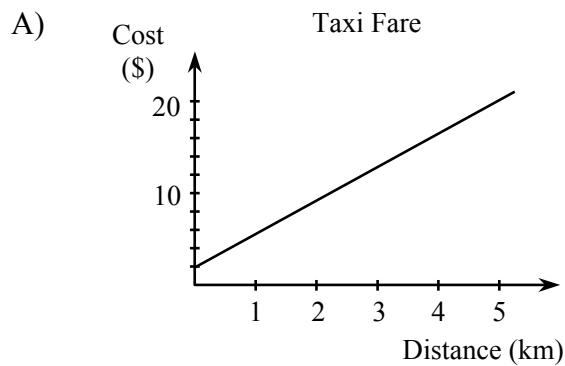
REVIEW QUESTIONS #2

① In Computer class, students determine how fast they can accurately type. Jordan is able to type 35 words in 60 seconds

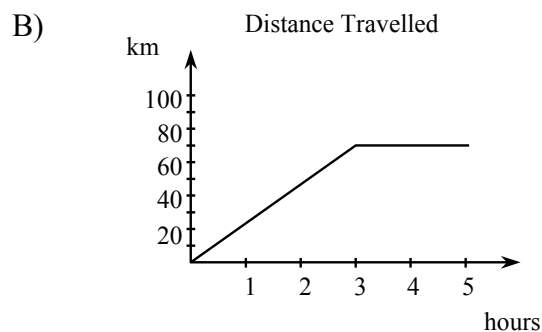
Of the following, which student can type faster than Jordan can?

- A) Sami types 32 words in 60 seconds.
- B) Rachel types 35 words in 80 seconds.
- C) Marty types 37 words in 55 seconds.
- D) Liam types 70 words in 120 seconds.

② Which of the following situations represents a proportional situation?



- C) Laurie works 15 hours and earns \$105; she works 35 hours and earns \$280.



D)

Packs of gum	Price (\$)
4	3.20
10	8.00
15	12.00

 Store

③ A picture frame is in the shape of a regular octagon with side 8.3 cm.

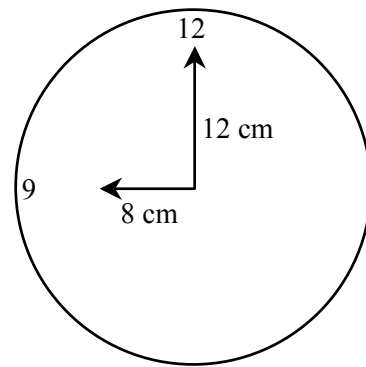
The artist who designed the frame would like to design another one in the shape of a regular pentagon, but with the same perimeter as the original.

What is the length of one side of this new frame?

- | | |
|------------|-------------|
| A) 5.19 cm | C) 13.28 cm |
| B) 9.96 cm | D) 41.50 cm |

④ The hands of a clock have the dimensions shown at the right.

What distance, to the nearest centimetre, does the tip of the longer hand travel in 45 minutes?



- | | |
|----------|-----------|
| A) 28 cm | C) 75 cm |
| B) 57 cm | D) 339 cm |

⑤ Amir (A), Brian (B), Camille (C) and Daria (D) have been selected to represent Quebec at a national public-speaking competition.

The students' names will be selected randomly to determine the order in which they will give their speeches.

In how many of the possible outcomes does Brian appear first?

- | | |
|------|-------|
| A) 4 | C) 8 |
| B) 6 | D) 12 |

⑥ In a word game there are 45 vowel cards. The number of cards for each vowel is listed below.

Vowels	A	E	I	O	U
Number of cards	9	15	8	6	7

A card is drawn at random from these vowel cards. What is the probability of drawing a card with the letter E?

A) $\frac{1}{45}$

C) $\frac{1}{5}$

B) $\frac{1}{15}$

D) $\frac{1}{3}$

⑦ a) Alli bought a pair of shoes regularly priced \$90. They were on sale at 20% off. What was the sale price of the shoes?
b) Alli also bought a pair of boots for \$110 and paid tax [GST + PST] on this amount. What was the total price she paid for the boots?

⑧ Simplify each of the following expressions:

a) $-2(3a - 5)$

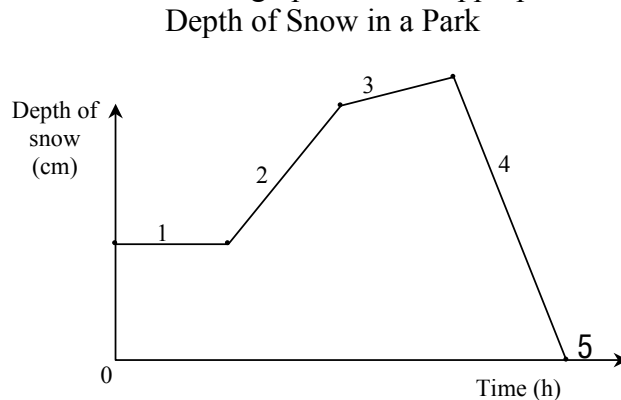
b) $\frac{8a - 6}{2}$

⑨ Solve for x in the following equations:

a) $3x + 2(4x - 13) = -2x$

b) $5x + 18 = 3 - x$

⑩ The sections of the graph below can be described by some of the following statements. Match each section in the graph with the appropriate statement. You may use a statement only once.



- A There is no snow on the ground.
 B The snow melts until it is gone.
 C No snow is falling.
 D Light snow is falling.
 E Heavy snow is falling.

⑪ Peter wants to rent a bicycle while at the beach. The rental cost is \$3.00 plus \$2.00 for each hour that he keeps the bike. Complete the table of values that represents this situation.

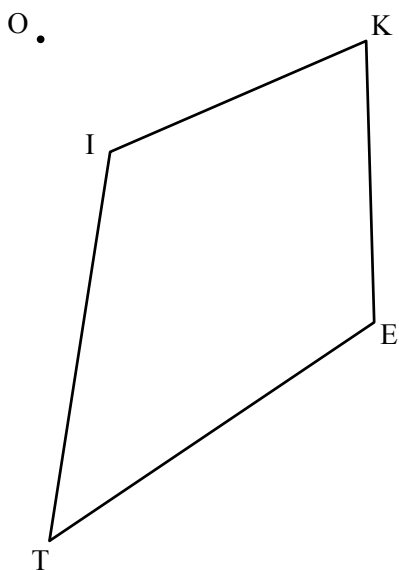
Number of hours	2	5	6	
Rental costs (\$)				19.00

⑫ Maria is in charge of mixing fruit drinks for the basketball team. For every 2 servings, she mixes 0.5 L of water, 25 mL of orange juice concentrate and 5 mL of sugar. How much orange juice concentrate will she need to serve the 11 players on the team?

⑬ Stephanie, her brothers Simon and Birch each contributed money to buy their parents an anniversary gift. Simon contributed twice as much as Stephanie and Birch contributed \$10 more than three times the amount contributed by Stephanie. Together they contributed \$310. How much did each person contribute?

⑭ An artist is designing the front cover of a children's book. The length of the front cover of the rectangular book is 4 cm less than twice its width. The perimeter of the front cover is 166 cm. What is the area of the front cover of this book in cm^2 ?

①⑤ The sketch of a piece of plastic used to make a kite is shown below. Jill would like to make a similar kite, using a dilatation (similarity transformation). Construct and label the image $K'I'T'E'$ of this kite, using a scale factor (ratio of similarity) of 2 and center O .



①⑥ Cass usually pays \$20 for a haircut, taxes included. The last time she had her hair cut, she bought some hair conditioner for \$13. She had to pay a tax of 15% on this. Her total bill for the hair cut and the conditioner was \$40.95. Surprised, Cass realized that the cost of a haircut must have gone up. By what percent has the cost of a haircut increased?

①⑦ Helene has three "loonies" (\$1 coins), and one quarter (\$0.25) in her pocket. She randomly takes two coins out of her pocket. What is the probability that she will NOT have taken \$2.00 from her pocket?