

Q1. The profit generated by company ABC is divided between its two founders Jack and Mark in a 4:3 ratio respectively.

Column 1	Column 2
Jack's share when the profit generated by company ABC is \$ 8000	\$5000

- What is the correct answer?
- Quantity in column 1 is higher
- Quantity in column 2 is higher
- The data provided isn't enough to determine the answer
- Both the quantities given are equal

Q2. Assume that y is greater than 3.

Quantity 1: $(4y+2)/5$

Quantity 2: Y

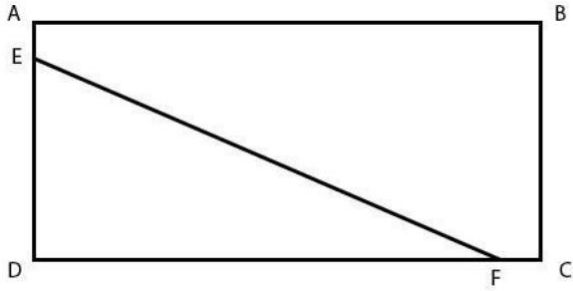
What is the correct answer?

- Quantity in column 1 is higher
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Q3. If $8x+64 = 8-6x$, what is the value of x ?

- -4
- -56
- 12
- 7

Q4: In the rectangle above, $AB = x$ feet, $BC = y$ feet, and $AE = FC = 2$ feet. What is the area of triangle DEF, in square feet?



- $xy - 2x - 2y + 4$
- $xy - 2x - 2y - 4$
- $xy/2 - x - y + 2$
- $xy/2 - x - y - 2$
- $xy/2 + 2$

Q5. There is a glass jar containing 60 jelly beans. Out of these 60 jelly beans, 22 are black, 18 are blue, 11 are orange, 5 are maroon and 4 are violet. Assume that a single jelly bean has to be chosen at random. Then what is the probability that the jelly bean will be neither maroon nor violet?

- 0.09
- 0.15
- 0.54
- 0.85
- 0.91

Q6. Which two of the following numbers have a product that is between -1 and 0 ?

- -20
- -10
- 2^{-4}
- 3^{-2}

Q7. The average of 10 numbers is 7. Which of the following statements is true? Indicate all true statements.

- The average increases by 1 if each number increases by 1
- The average becomes 3 times, if each number becomes three times
- If the sum of the numbers increases by 7, the average increases by 1
- If seven numbers increase by 3 each and three numbers decrease by 7 each, the average remains the same
- The sum of the numbers is 70

Q8. Working alone at its constant rate, machine A produces k liters of a chemical in 10 minutes. Working alone at its constant rate, machine B produces k liters of the chemical in 15 minutes. How many minutes does it take machines A and B, working simultaneously at their respective constant rates, to produce k liters of the chemical?