ID: 03503d49

A business owner plans to purchase the same model of chair for each of the 81 employees. The total budget to spend on these chairs is $\$14{,}000$, which includes a 7% sales tax. Which of the following is closest to the maximum possible price per chair, before sales tax, the business owner could pay based on this budget?

A. $\$148.15$

B. $\$161.53$

C. $\$172.84$

D. $\$184.94$

ID: fbd5483f

In a set of four consecutive odd integers, where the integers are ordered from least to greatest, the first integer is represented by x. The product of 12 and the fourth odd integer is at most 26 less than the sum of the first and third odd integers. Which inequality represents this situation?

A. $12(x+6) \leq x + (x+4) - 26$

B. $12(x+6) \geq 26 - (x + (x+4))$

C. $12(x+4) \leq x + (x+3) - 26$

D. $12(x+4) \geq 26 - (x + (x+3))$

ID: 68c5c81a

$$11x + 14y \leq 115$$

Anthony will spend at most $\$115$ to purchase x small cheese pizzas and y large cheese pizzas for a team dinner. The given inequality represents this situation. Which of the following is the best interpretation of $14y$ in this context?

A. The amount, in dollars, Anthony will spend on each large cheese pizza

B. The amount, in dollars, Anthony will spend on each small cheese pizza

C. The total amount, in dollars, Anthony will spend on large cheese pizzas

D. The total amount, in dollars, Anthony will spend on small cheese pizzas

ID: b8e73b5b

Ken is working this summer as part of a crew on a farm. He earned $8 per hour for the first 10 hours he worked this week. Because of his performance, his crew leader raised his salary to $10 per hour for the rest of the week. Ken saves 90% of his earnings from each week. What is the least number of hours he must work the rest of the week to save at least $270 for the week?

A. 38

B. 33

C. 22

D. 16

ID: 830120b0

$$y > 2x - 1$$
$$2x > 5$$

Which of the following consists of the y-coordinates of all the points that satisfy the system of inequalities above?

A. $y > 6$

B. $y > 4$

C. $y > \frac{5}{2}$

D. $y > \frac{3}{2}$

ID: d8539e09

$$y < 6x + 2$$

For which of the following tables are all the values of x and their corresponding values of y solutions to the given inequality?

A.

x	y
3	20
5	32
7	44

B.

x	y
3	16
5	36
7	40

C.

x	y
3	16
5	28
7	40

D.

x	y
3	24
5	36
7	48

ID: d8539e09

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D.

x	y
3	24
5	36
7	48

ID: 48fb34c8

$$y > 13x - 18$$

For which of the following tables are all the values of x and their corresponding values of y solutions to the given inequality?

A.

x	y
3	21
5	47
8	86

B.

x	y
3	26
5	42
8	86

C.

x	y
3	16
5	42
8	81

D.

x	y
3	26
5	52
8	91

ID: 963da34c

A shipping service restricts the dimensions of the boxes it will ship for a certain type of service. The restriction states that for boxes shaped like rectangular prisms, the sum of the perimeter of the base of the box and the height of the box cannot exceed 130 inches. The perimeter of the base is determined using the width and length of the box. If a box has a height of 60 inches and its length is 2.5 times the width, which inequality shows the allowable width x, in inches, of the box?

A. $0 < x \leq 10$

B. $0 < x \leq 11\frac{2}{3}$

C. $0 < x \leq 17\frac{1}{2}$

D. $0 < x \leq 20$