Bellwork Alg 2 Tuesday, March 19, 2019

1. Which of the following is equivalent to the following expression? $4(x^2 - 3) - 2(x^2 + 5)$

A) $2x^2 - 22$ B) $2x^2 - 2$ C) $2x^2 + 2$ D) $2x^4 - 22$

2. Prices of 14 Different Cars

Type of Car	Priced ≤ $25,000	Priced > $25,000	Total
Nonhybrid	5	3	8
Hybrid	2	4	6
Total	7	7	14

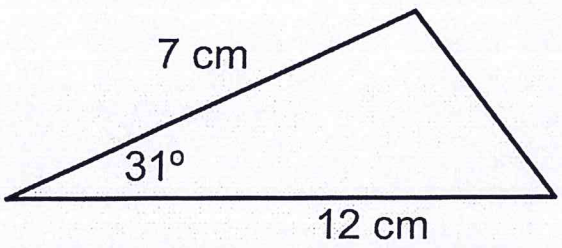
The table above shows information about 14 cars listed for sale on a website. If one of the cars listed for sale is selected at random, what is the probability that the car selected will be a hybrid car priced no more than $25,000?

A) $\frac{1}{7}$ B) $\frac{2}{7}$ C) $\frac{1}{3}$ D) $\frac{4}{7}$

3. During the first month of sales, a company sold 1,300,000 units of a certain type of smartphone. During the same month, 15% of the units sold were returned. If sales and the return rate remain the same for each of the next 5 months, about how many units of this smartphone will be returned to the company during this 6-month period?

A) 195,000 B) 975,000 C) 1,170,000 D) 6,630,000

4. Find the area of this triangle to the nearest tenth.



Bellwork Alg 2 Tuesday, March 19, 2019 ANSWERS

1. Which of the following is equivalent to the following expression? $4(x^2-3)-2(x^2+5)$

A) $2x^2-22$ B) $2x^2-2$ C) $2x^2+2$ D) $2x^4-22$

$4x^2-12-2x^2-10$

$2x^2-22$

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$\frac{2}{14} = \frac{1}{7}$

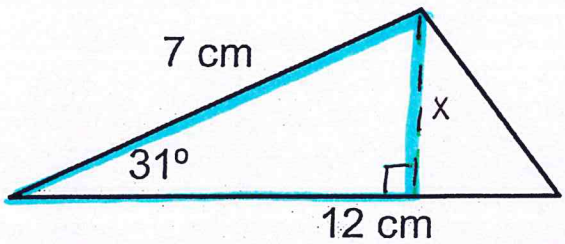
3. During the first month of sales, a company sold 1,300,000 units of a certain type of smartphone. During the same month, 15% of the units sold were returned. If sales and the return rate remain the same for each of the next 5 months, about how many units of this smartphone will be returned to the company during this 6-month period?

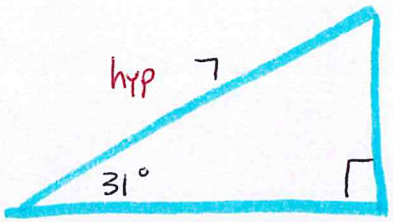
A) 195,000 B) 975,000 C) 1,170,000 D) 6,630,000

Returned in 1 month $= (.15)(1{,}300{,}000)$
$= 195{,}000$

Returned in 6 months
$= (6)(195{,}000)$
$= 1{,}170{,}000$

4. Find the area of this triangle to the nearest tenth.

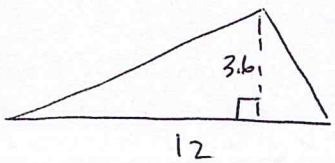




SOHCAHTOA

$\sin 31° = \frac{x}{7}$

$x = 3.6$



$A = \frac{1}{2}(12)(3.6)$

$A = 21.6\text{cm}^2$