|x – 2| > 8

|4x – 5| ≥ 7

A hotel has a budget of $73,230 to repaint the lobby and some hotel rooms. The hotel spent $17,900 on painting the lobby. Each room costs $3,000 to paint. The inequality 17,900 + 3,000n ≤ $73,230 can be used to determine the number of rooms (n) the hotel can repaint.

Which statement about the number of rooms that can be painted is true?

A. The hotel can repaint 19 rooms.

B. The maximum number of rooms that can be repainted is 4.

C. The minimum number of rooms that can be repainted is 4.

D. The hotel can repaint 4 rooms, but this number is neither the maximum nor the

minimum.

Question 7 .

Molly paid $7,327.90 for a used car. If the price paid includes a 6% discount, which of the following equations can be used to determine the price of the car before the discount?

(Let x represent the cost of the car and y represent the total cost before the discount.)

A. y = 1.6x

B. y = 0.94x

C. y = x + 6x

D. y = 1.06x

Question 8 .

Olivia purchased x child tickets and y adult tickets at the movies. She spent a total of $52. The equation below describes the relationship between the number of child tickets and the number of adult tickets purchased.

The ordered pair (5, 3) is the solution to the equation. What does the solution (5, 3) represent?

A. Olivia purchased 5 child tickets and 3 adult tickets.

B. Child tickets cost $5 each and adult tickets cost $3 each.

C. Olivia spent $5 on child tickets and $3 on adult tickets.

D. Olivia purchased 5 child tickets and 3 adult tickets.

Maria is weighing a glass jar filled with marbles. The weight of each marble is 2 grams and the weight of the empty jar is x grams. There are 67 marbles in the glass jar and the total weight of the marbles and the glass jar is 695 grams.

Which equation could be used to find x, the weight of the empty glass jar?

A. 695 = 67x + 4

B. 695 = 2x + 67

C. 695 = 2(67) + x

D. 695 = 2x ÷ 67

Cassie received a 20%-off coupon and a $8-off coupon from a department store. She visits the department store during a tax-free sale and plans to spend no more than $30.40. She also plans to use both of the coupons she received on her purchase. If this situation is modeled by the inequality below, what must be the original purchase total, x, before the discounts are applied?

0.8x - $8 ≤ $30.40

A. The original purchase total must be at least to $48 before the discounts are applied.

B. The original purchase total must be at least to $38.40 before the discounts are applied.

C. The original purchase total must be at most to $48 before the discounts are applied.

D. The original purchase total must be at least to $32.86 before the discounts are applied

Harvey is solving an equation. His work is shown below.

8x + (8x + 3) = 25

(8x + 8x) + 3 = 25

16x + 3 = 25

Which statement describes the procedure Harvey used in his work and which property justifies the procedure?

A. Harvey regrouped the terms to add 8x and 8x. This procedure is justified by the

associative property.

B. Harvey regrouped the terms to multiply 8x and 8x by 3. This procedure is justified by

the associative property.

C. Harvey regrouped the terms to multiply 8x and 8x. This procedure is justified by the

commutative property.

D. Harvey regrouped the terms to add 8x and 8x and 3. This procedure is justified by the

commutative property.