Bellwork Alg 2 Tuesday, December 18, 2018

1. A moving company uses plastic wrap to bundle groups of boxes together. If a portion of plastic wrap that measures 900 inches in length is used to bundle each group of boxes, how many groups of boxes can be bundled using 1,500 feet of the same type of plastic wrap?

A) 15 B) 20 C) 25 D) 30

2. The table below shows the number of calories in a cheeseburger at six different resaurants.

Restaurant	Blue Jay	Clear Lake Cafe	Molly's	Riverside Diner	Maya's Bistro	Tom's Place
Calories	810	900	740	1,120	1,050	700

What is the difference in the number of calories in a cheeseburger at the Riverside Diner and the median number of calories in cheeseburgers at all six restaurants.

A) 190 B) 233 C) 265 D) 390

Questions 3-5 refer to the following information.

A high school developed a program called Propel, which offers extra guidance and support during the 9th-grade year. Before the school year began, 327 rising 9th graders were selected at random to participate in the study; 109 of those students were randomly assigned to enroll in the Propel program and the remaining students served as a control group. A summary of the year-end grade point averages (GPA) for the 327 9th-grade students who were chosen for the study are shown in the table below

GPA	Enrolled in Propel	Not enrolled in Propel
3.0 or greater	61	95
less than 3.0	48	123

3. If a 9th-grade student at the high school is chosen at random, which of the following is closest to the probability that the student will have a GPA of 3.0 or greater?

A) 0.64 B) 0.48 C) 0.33 D) 0.19

4. What is the difference, to the nearest whole percent, between the percentage of students enrolled in Propel who had a GPA of 3.0 or greater and the percentage of students not enrolled in Propel who had a GPA of 3.0 or greater?

A) 4% B) 8% C) 10% D) 12%

5. Of the students enrolled in the Propel program, the ratio of boys to girls is approximately 2:3. Which of the following is the best estimate of the number of girls enrolled in the program?

A) 44 B) 65 C) 73 D) 131

Bellwork Alg 2 Tuesday, December 18, 2018 ANSWERS

1. A moving company uses plastic wrap to bundle groups of boxes together. If a portion of plastic wrap that measures 900 inches in length is used to bundle each group of boxes, how many groups of boxes can be bundled using 1,500 feet of the same type of plastic wrap?

A) 15 B) 20 C) 25 D) 30

900 in/bundle

$1500\ ft \cdot \frac{12\ in}{1\ ft} = 18000\ in$

bundles = 18000 in ÷ 900 in/bundle

= 20

B

2. The table below shows the number of calories in a cheeseburger at six different resaurants.

Restaurant	Blue Jay	Clear Lake Cafe	Molly's	Riverside Diner	Maya's Bistro	Tom's Place
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A) 190 B) 233 C) 265 D) 390

700 740 810 900 1050 1120

$\text{median} = \frac{810 + 900}{2} = 855$

1120 − 855 = 265

C

Questions 3-5 refer to the following information.

A high school developed a program called Propel, which offers extra guidance and support during the 9th-grade year. Before the school year began, 327 rising 9th graders were selected at random to participate in the study; 109 of those students were randomly assigned to enroll in the Propel program and the remaining students served as a control group. A summary of the year-end grade point averages (GPA) for the 327 9th-grade students who were chosen for the study are shown in the table below

GPA	Enrolled in Propel	Not enrolled in Propel
3.0 or greater	61	95
less than 3.0	48	123

109 218

= 156

= 171

3. If a 9th-grade student at the high school is chosen at random, which of the following is closest to the probability that the student will have a GPA of 3.0 or greater?

A) 0.64 B) 0.48 C) 0.33 D) 0.19

$\frac{61+95}{327} = \frac{156}{327} \approx 0.48$ B

4. What is the difference, to the nearest whole percent, between the percentage of students enrolled in Propel who had a GPA of 3.0 or greater and the percentage of students not enrolled in Propel who had a GPA of 3.0 or greater?

A) 4% B) 8% C) 10% D) 12%

enrolled in propel GPA $\geq 3.0 = \frac{61}{109} \approx 56\%$

not enrolled in Propel GPA $\geq 3.0 = \frac{95}{218} \approx 44\%$

D

difference $56-44 = 12\%$

5. Of the students enrolled in the Propel program, the ratio of boys to girls is approximately 2:3. Which of the following is the best estimate of the number of girls enrolled in the program?

A) 44 B) 65 C) 73 D) 131

TOTAL in propel = 109

B

RATIO $\frac{\text{Boys}}{\text{Girls}} = \frac{2}{3}$ $\Big\}$ $\frac{\text{Girls}}{\text{TOT}} = \frac{3}{5}$

$\frac{\text{Girls}}{\text{TOTAL}} \quad \frac{3}{5} = \frac{x}{109} \quad x = 65.4$ 2