

ACCUPLACER Next Generation Quantitative Reasoning Algebra and Statistics Answers

Section: ACCUPLACER Next Generation Quantitative Reasoning Algebra and Statistics Exams • Total Questions: 10 •

Format: Verified Q&A

1. Which of the following inequalities is graphed in the xy-plane above?

- (A) $y \geq \frac{1}{2}x + 2$
- (B) $y \geq \frac{1}{2}x - 2$
- (C) $y \geq -\frac{1}{2}x + 2$
- (D) $y \geq -\frac{1}{2}x - 2$

2. At a certain supermarket, Monica paid \$3.20 for 2 pounds of apples and 2 pounds of oranges, while Sarah paid \$4.40 for 2 pounds of apples and 4 pounds of oranges. At these rates, what is the cost, in dollars, for 3 pounds of oranges?

- (A) \$0.60
- (B) \$1.80
- (C) \$2.40
- (D) \$3.80

3. Triangle ABC has no right angles as shown. Which of the following is the correct calculation of the area of triangle ABC?

- (A) $A = \frac{1}{2}(4.1)(3.2) \sin (25^\circ)$
- (B) $A = \frac{1}{2}(1.7)(3.2) \sin (25^\circ)$
- (C) $A = \frac{1}{2}(4.1)(1.7) \sin (25^\circ)$
- (D) $A = \frac{1}{2}(4.1)(3.2)(1.7) \sin (25^\circ)$

4. Pedro is using a map with a scale on which $\frac{5}{8}$ of an inch represents 1 mile. The distance he plans to bicycle is $\frac{101}{8}$ inches on the map. Which of the following is closest to the actual distance in miles?

- (A) 11 miles
- (B) 16 miles
- (C) 18 miles
- (D) 22 miles

5. In the figure above, the circle has center O. If the measure of arc APB is 56° , what is the value of x ?

- (A) 28
 - (B) 34
 - (C) 56
 - (D) 62
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6. Maria walks x yards in 15 minutes. If she continues to walk at the same average rate, how many more yards will she walk in the next 7 minutes?

- (A) $15x/7$
 - (B) $(x/15)+7$
 - (C) $(x+7)/15$
 - (D) $7x/15$
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7. The number of bacteria in a certain dish over a 5-hour period is modeled by the function f defined above, where t represents time, in hours. According to the model, how many bacteria were in the dish at time $t = 0$?

$$f(t) = 100(2^{2t})$$

- (B) 50
 - (C) 100
 - (D) 200
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8. If $ab - c = cb$, and $a \neq c$, then $b =$

- (A) $a/c - a$
 - (B) $c/a - c$
 - (D) $2c/a$
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9. Which of the following is an equation of the line graphed in the xy -plane above?

- (A) $y = x + 2$
 - (B) $y = 1/2x + 2$
 - (C) $y = 3/2x + 2$
 - (D) $y = 2x + 4$
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10. Mariha is evaluating three different driving schools. She asked 50 people who attended one of the schools whether they passed the driving test on the first try. The results of the survey are shown in the table below. P is the probability of randomly selecting a student who passed on the first try from the students who attended A-1 Driving School. Q is the probability of randomly selecting a student who attended A-1 Driving School from the students who passed the driving test on the first try. Which of the following must be true?

- (A) $P=Q$
- (B) $P<Q$
- (C) $P>Q$
- (D) The probabilities cannot be compared.