ALG 2 Bellwork Wed, Jan 14, 2015

2 △ △ △ △ △ △ △ △ △ **2**

7. What is the least common denominator for adding the fractions $\frac{4}{15}$, $\frac{1}{12}$, and $\frac{3}{8}$?

   A. 40
   B. 120
   C. 180
   D. 480
   E. 1,440

8. The product $(2x^4y)(3x^5y^8)$ is equivalent to:

   F. $5x^9y^9$
   G. $6x^9y^8$
   H. $6x^9y^9$
   J. $5x^{20}y^8$
   K. $6x^{20}y^8$

9. It costs a dollars for an adult ticket to a reggae concert and s dollars for a student ticket. The difference between the cost of 12 adult tickets and 18 student tickets is \$36. Which of the following equations represents this relationship between a and s ?

   A. $\frac{12a}{18s} = 36$
   B. $216as = 36$
   C. $|12a - 18s| = 36$
   D. $|12a + 18s| = 36$
   E. $|18a + 12s| = 36$

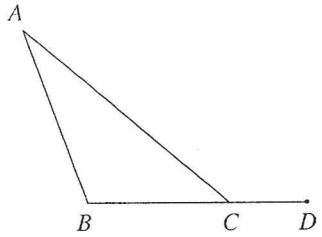
10. If $x > 1$, then which of the following has the LEAST value?

    F. $\sqrt{x}$
    G. $\sqrt{2x}$
    H. $\sqrt{x \cdot x}$
    J. $x\sqrt{x}$
    K. $x \cdot x$

11. Charles defined a new operation, ♦, on pairs of ordered pairs of integers as follows: $(a,b) \diamond (c,d) = \frac{ac + bd}{ab - cd}$. What is the value of $(2,1) \diamond (3,4)$?

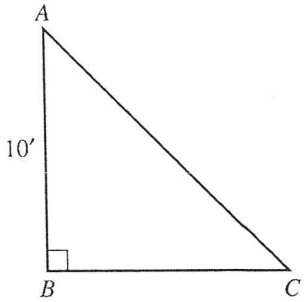
    A. −2
    B. −1
    C. 2
    D. 5
    E. 10

12. In the figure below, $\angle BAC$ measures 30°, $\angle ABC$ measures 110°, and points B, C, and D are collinear. What is the measure of $\angle ACD$?



    F. 150°
    G. 140°
    H. 130°
    J. 120°
    K. 110°

13. In the isosceles right triangle below, AB = 10 feet. What is the length, in feet, of $\overline{AC}$?



    A. 5
    B. 10
    C. 20
    D. $\sqrt{20}$
    E. $10\sqrt{2}$

14. In a bag of 400 jelly beans, 25% of the jelly beans are red in color. If you randomly pick a jelly bean from the bag, what is the probability that the jelly bean picked is NOT one of the red jelly beans?

    F. $\frac{1}{2}$
    G. $\frac{1}{4}$
    H. $\frac{3}{4}$
    J. $\frac{1}{16}$
    K. $\frac{15}{16}$

Bellwork Answers

7. B

8. H

9. C

10. F

11. B

12. G

13. E

14. H