Day 10 Math Answers

1. B

You can use your calculator to insert possible answers.

$(1/3)(12/7) + (1/4)(12/7) = 1$

2. K

If you have a fraction in the exponent, the numerator is the power and the denominator is the root.

$x^{2/3} = \sqrt[3]{x^2}$

3. B. 4

$2^{2x+7} = 2^{15}$

$2x + 7 = 15$

$\frac{2x}{2} = \frac{8}{2}$

$x = 4$

4. H

$3^3 = 27$

$3^4 = 81$

The answer must be between 3 and 4.

5. D $21x^{14}$

When you multiply numbers with exponents, multiple the coefficients and add the exponents. When you divide numbers with exponents, divide the coefficients and subtract the exponents.

$(3x^5)(7x^9) = 21x^{14}$

6. H. 11/32

   You are trying to find a wrench between 5/16 (small) and 3/8 (large). You can use your calculator and convert these to decimals. It is a good idea to start in the middle and either work to a bigger or smaller number.

   13/32 = .406
   25/64 = .390
   3/8 = .375 LARGE
   11/32 = .34376
   5/16 = .3125 SMALL
   9/32 = .281
   1/4 = .250

7. C. 1

   The **zero exponent rule** says any base with an exponent of zero is equal to 1.

8. J

   C = 5/9 (F-32)
   C = 5/9 (59-32)
   C = 5/9 (27)
   C = 15

   C= 5/9 (F-32)
   C = 5/9 (68-32)
   C = 5/9 (36)
   C = 20