Week 9 Thursday Homework Course 3 (Demo Version)

Read each question carefully.

AZ-8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^5 = 3^3 = 1/3^3 = 1/27$. [From cluster: Work with radicals and integer exponents]

1)

$$4^2 \times 4^6 =$$

- A) 4³
- B) 4⁴
- C) 4⁸
- D) 412

AZ-8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^5 = 3^4 = 1/3^3 = 1/2^5$. [From cluster: Work with radicals and integer exponents]

2) If the equation below is true, what is the missing exponent?

$$3^{-3} \times 3^4 \times 3^2 = 3$$
?

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3)

$$3^4 =$$

- A) 26
- B) 4³
- C) 9²
- D) **81**⁰

AZ-8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that SQRT2 is irrational. [From cluster: Work with radicals and integer exponents]

4) What is d?

$$d \times d \times d = 125$$

- A) cube root of 125
- B) square root of 50
- c) cube of 5
- D) square of 25

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5) What is the value of the expression below?

 $\sqrt{169}$

- A) 12
- B) 13
- c) 84.5
- D) 28,561

AZ-8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that SQRT2 is irrational. [From cluster: Work with radicals and integer exponents]

6) What is the value of the expression below?

 $-\sqrt{4}$

- A) -16
- B) -2
- c) 2
- D) 16