## 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, $3^{\wedge} 2 \times 3^{\wedge}-5=3^{\wedge}-3=1 / 3^{\wedge} 3=1 / 27$. [From cluster: Work with radicals and integer exponents]
1)

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

A)
$4^{3}$
B)
$4^{4}$
C)
$4^{8}$
D)
$4^{12}$
AZ-8.EE.A. 1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^{\wedge} 2 \times 3^{\wedge}-5=3^{\wedge}-3=1 / 3^{\wedge} 3=1 / 27$. [From cluster: Work with radicals and integer exponents]
2) If the equation below is true, what is the missing exponent?

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

## Week 9 Thursday Homework Course 3 (Demo Version)

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

$$
3^{4}=
$$

A) $2^{6}$
B) $4^{3}$
C) $9^{2}$
D)
$81^{0}$
AZ-8.EE.A. 2 Use square root and cube root symbols to represent solutions to equations of the form $x^{\wedge} 2=p$ and $x^{\wedge} 3=p$, 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

## Week 9 Thursday Homework Course 3 (Demo Version)

AZ-8.EE.A. 2 Use square root and cube root symbols to represent solutions to equations of the form $x^{\wedge} 2=p$ and $x^{\wedge} 3=p$, 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]

## 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 $x^{\wedge} 2=p$ and $x^{\wedge} 3=p$, 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

