Problem 1. **(1 point)** `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-fundamental.pg`

If we are told that $AB = 0$, then what can we infer?

By the zero product property we know:
___$= 0$ OR ___$= 0$

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
"If the product of two values is zero, then at least one of the values must be zero."

Correct Answers:

- *A*
- *B*

Problem 2. **(1 point)** `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-binomials.pg`

If we are told that $(x-7)(x-8) = 0$, then what can we infer?

By the zero product property we know:
___$= 0$ OR ___$= 0$

And therefore we know that:

$x =$ ___ OR $x =$ ___

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
If $AB = 0$, then either $A = 0$ or $B = 0$.

How does the zero product property apply to this problem?

Correct Answers:

- $x - 7$
- $x - 8$
- 7
- 8

Problem 3. **(1 point)** `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-binomials-medium.pg`

If we are told that $(2x-7)(3x-4) = 0$, then what can we infer?

By the zero product property we know:
___$= 0$ OR ___$= 0$

And therefore we know that:

$x =$___ OR $x =$___

- Do not use decimal approximations in your answer.
- Use fractions instead.

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
If $AB = 0$, then either $A = 0$ or $B = 0$.

How does the zero product property apply to this problem?

Correct Answers:
- $2x - 7$
- $3x - 4$
- $\dfrac{7}{2}$
- $\dfrac{4}{3}$

Problem 4. (**1 point**) `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-standard-basic.pg`

We want to solve the equation
$$x^2 - 14x + 45 = 0$$

First, factor $x^2 - 14x + 45$: _____

By the zero product property we know:
___ $= 0$ OR ___ $= 0$

And therefore we know that:

$x =$ ___ OR $x =$ ___

- Do not use decimal approximations in your answer.
- Use fractions instead.

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
If $MN = 0$, then either $M = 0$ or $N = 0$.

How does the zero product property apply to this problem?

Perhaps you should factor the polynomial first...

Correct Answers:

- $(x-9)(x-5)$
- $x-5$
- $x-9$
- 5
- 9

Problem 5. **(1 point)** `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-standard-medium.pg`

We want to solve the equation
$$3x^2 - 17x - 28 = 0$$

First, factor $3x^2 - 17x - 28$: _____

By the zero product property we know:
___$= 0$ OR ___$= 0$

And therefore we know that:

$x =$___ OR $x =$___

- Do not use decimal approximations in your answer.
- Use fractions instead.

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
If $MN = 0$, then either $M = 0$ or $N = 0$.

How does the zero product property apply to this problem?

Perhaps you should factor the polynomial first...

Correct Answers:
- $(x - 7)(3x + 4)$
- $3x + 4$
- $x - 7$
- $-\dfrac{4}{3}$
- 7

Problem 6. **(1 point)** `CUNY/CityTech/CollegeAlgebra_Trig/setZeroProductProperty/ZPP-standard-hard.pg`

We want to solve the equation

$$10x^2 + 13x - 3 = 0$$

First, factor $10x^2 + 13x - 3$: _____

By the zero product property we know:

___$= 0$ OR ___$= 0$

And therefore we know that:

$x =$___ OR $x =$___

- Do not use decimal approximations in your answer.
- Use fractions instead.

Hint: *(Instructor hint preview: show the student hint after the following number of attempts: 2)*

Remember that the zero product property states:
If $MN = 0$, then either $M = 0$ or $N = 0$.

How does the zero product property apply to this problem?

Perhaps you should factor the polynomial first...

Correct Answers:

- $(2x+3)(5x-1)$
- $5x-1$
- $2x+3$
- $\dfrac{1}{5}$
- $-\dfrac{3}{2}$