

Answer on Question #57178 – Math – Algebra

Question

1. Which of the following are true statements about the expression 12^5

Check all that apply.

- : 12 is the exponent and tells us how many times we should multiply 5 by itself.
- : 12 is the base
- : 5 is the base
- : 5 is the exponent and tells us how many times we should multiply 12 by itself.

Solution

1. 12 is the exponent and tells us how many times we should multiply 5 by itself – False.
2. 12 is the base – True.
3. 5 is the base - False.
4. 5 is the exponent and tells us how many times we should multiply 12 by itself – True.

Answer:

1. 12 is the base – True.
2. 5 is the exponent and tells us how many times we should multiply 12 by itself – True.

Question

2. If $\sqrt[n]{a} = r$, then which of the following are true statements? Check all that apply.

$$a^r = n$$

$$a^{\frac{1}{n}} = r$$

$$n^{\frac{1}{r}} = a$$

$$r^n = a$$

Solution

1. $a^r = n$ – False.
2. $a^{\frac{1}{n}} = r$ - True.
3. $n^{\frac{1}{r}} = a$ - False.
4. $r^n = a$ - True.

Answer:

1. $a^{\frac{1}{n}} = r$ - True.
2. $r^n = a$ - True.