Edulastic

Standard 8.EE.A.1

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1 Which expression is equivalent to $4^7 \times 4^{-5}$?

(A) 4^{12}

(B) 4^2

(C) 4^{-2}

(D) 4^{-35}

3 Part A

(a)

Which of the following expressions is equivalent to 4^{-3}?

(A) $\frac{1}{-4^{-3}}$

(B) -4^{-3}

(C) $\frac{1}{4^3}$

(D) $\frac{1}{-4^3}$

8 Find the missing exponent. $7^{?} \times (7^5)^4 = 7^{34}$ Place only the missing exponent value in the answer box? 1

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9 Which expressions equivalent to $\frac{3^{-8}}{3^{-4}}$?

Select **all** that apply.

A 3^{-12}

B 3^{-4}

C 3^2

D $\frac{1}{3^2}$

E $\frac{1}{3^4}$

F $\frac{1}{3^{12}}$

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10 **Determine whether each statement is true or false.**

	True	False
	○	○
	○	○
	○	○
	○	○

---

11 Choose the correct expanded form of the following expression.

(a) $\left(\frac{7}{8}\right)^2$

(A) $2 \cdot 2$

(B) $\frac{7}{8} \cdot \frac{7}{8}$

(C) $\frac{7}{8} \cdot 2$

(D) $\frac{8}{7} \cdot \frac{8}{7}$

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13 Select all the following that equal 1.

[A] 5^0

[B]

[C]

[D]

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15 Examine each number given in the first column. Rewrite the value as a number times a power of 10 and match the number with its corresponding scientific notation.

$325,500$	
325.5	
$3,255$	
32.55	

DRAG & DROP THE ANSWER

- 3.255×10^5
- 3.255×10^3
- 3.255×10^2
- 3.255×10^1

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16 Simplify the expression:

$$\frac{(2x)^3 \cdot 3\,(x)^5}{2\left((x)^2\right)^3}$$

(A) $9x^9$

(B) $9x^2$

(C) $12x^9$

(D) $12x^2$

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17 Select all of the expressions that have the same value as $\frac{4^5 \cdot 4^{-1}}{4^{-4}}$:

A $4^5 \cdot 4^0 \cdot 4^3$

B $(4^2)^4$

C $(4^{-4})^{-2}$

D $(4^{-2})^4$

E $\frac{4^{-4}}{4^4}$

F 4^8

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18 Find the value of each exponential expressions,
$9^2, 8^3, 1^0$

A $9^2 = 81,\ 8^3 = 512,\ 1^0 = 1$

B $9^2 = 81,\ 8^3 = 24,\ 1^0 = 0$

C $9^2 = 18,\ 8^3 = 24,\ 1^0 = 1$

D $9^2 = 18,\ 8^3 = 512,\ 1^0 = 0$

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19 Which of the following equations are true? Select **all** that apply

A $3^{-3} \times 3^5 = 3^2$

B $3^6 \times 3^{-2} = 3^{-3}$

C $3^4 \times 3^2 = 3^6$

D $3^{-2} \times 3^{-2} = \frac{1}{81}$

E $3^2 \times 3^2 = 3^0$

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20 Which expression is equivalent to $(5^{-2})^5 \times 5^4$?

(A) 5^{12}

(B) 5^7

(C) $\frac{1}{5^6}$

(D) $\frac{1}{5^{40}}$

Answer Key of Standard 8.EE.A.1

1. B
2. Tech Enhanced Item

3a. C

3b. Tech Enhanced Item

4. Tech Enhanced Item
5. Tech Enhanced Item
6. Tech Enhanced Item
7. Tech Enhanced Item
8. 1. 14
9. B, E
10. Tech Enhanced Item

11a. B

11b. Tech Enhanced Item

12. Tech Enhanced Item
13. A, C, D
14. Tech Enhanced Item
15. Tech Enhanced Item
16. D
17. A, B, C, F
18. A
19. A, C, D
20. C