

Lesson 12 Practice Problems

1. Select **all** the expressions that are equivalent to 64.

A. 2^6

B. 2^8

C. 4^3

D. 8^2

E. 16^4

F. 32^2

2. Select **all** the expressions that equal 3^4 .

A. 7

B. 4^3

C. 12

D. 81

E. 64

F. 9^2

3. 4^5 is equal to 1,024. Evaluate each expression.

a. 4^6

b. 4^4

c. $4^3 \cdot 4^2$

4. $6^3 = 216$. Using exponents, write three more expressions whose value is 216.

5. Find two different ways to rewrite $3xy + 6yz$ using the distributive property.

(From Unit 6, Lesson 11.)

6. Solve each equation.

$$a - 2.01 = 5.5$$

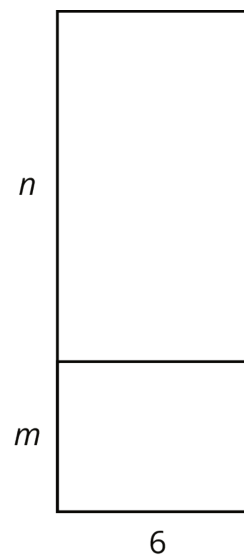
$$b + 2.01 = 5.5$$

$$10c = 13.71$$

$$100d = 13.71$$

(From Unit 6, Lesson 5.)

7. Which expressions represent the total area of the large rectangle? Select all that apply.



- A. $6(m + n)$
- B. $6n + m$
- C. $6n + 6m$
- D. $6mn$
- E. $(n + m)6$

(From Unit 6, Lesson 10.)

8. Is each statement true or false? Explain your reasoning.

a. $\frac{45}{100} \cdot 72 = \frac{45}{72} \cdot 100$

b. 16% of 250 is equal to 250% of 16

(From Unit 3, Lesson 16.)