

Lesson 16 Practice Problems

1. Evaluate each expression if $x = 3$.

a. 2^x

b. x^2

c. 1^x

d. x^1

e. $\left(\frac{1}{2}\right)^x$

2. Evaluate each expression for the given value of each variable.

a. $2 + x^3$, x is 3

b. x^2 , x is $\frac{1}{2}$

c. $3x^2 + y$, x is 5 y is 3

d. $10y + x^2$, x is 6 y is 4

3. Decide if the expressions have the same value. If not, determine which expression has the larger value.

a. 2^3 and 3^2

b. 1^{31} and 31^1

c. 4^2 and 2^4

d. $\left(\frac{1}{2}\right)^3$ and $\left(\frac{1}{3}\right)^2$

4. Match each equation to its solution.

A. $7 + x^2 = 16$

1. $x = 1$

B. $5 - x^2 = 1$

2. $x = 2$

C. $2 \cdot 2^3 = 2^x$

3. $x = 3$

D. $\frac{3^4}{3^x} = 27$

4. $x = 4$

5. An adult pass at the amusement park costs 1.6 times as much as a child's pass.

a. How many dollars does an adult pass cost if a child's pass costs:

\$5?

\$10?

w dollars?

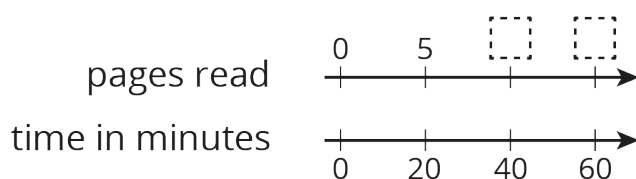
b. A child's pass costs \$15. How many dollars does an adult pass cost?

(From Unit 4, Lesson 6.)

6. Jada reads 5 pages every 20 minutes. At this rate, how many pages can she read in 1 hour?

○ Use a double number line to find the answer.

○ Use a table to find the answer.



pages read	time in minutes
5	20

Which strategy do you think is better, and why?

(From Unit 2, Lesson 10.)