# SSAT 数学硬骨头 v



## Question

Solve for all values of x that satisfy the equation:

$$x^2 - 12x + 20 = x - 10$$

#### **Corrected Question**

Data storage conversions are as follows:

- 8 bits = 1 byte
- $2^{10}$  bytes = 1 kilobyte
- $2^{20}$  bytes = 1 megabyte
- $2^{10}$  megabytes = 1 gigabyte

Based on these conversions, how many bits are equivalent to 2 gigabytes?

#### **Options:**

- A)  $2^{32}$
- B)  $2^{33}$
- C)  $2^{34}$
- D)  $2^{35}$

E) 
$$2^{36}$$

$$\sqrt{4/x^2} = 2/x^2$$

求 x

#### Question

A cone has a height that is **three times its radius**, and the cone's volume is  $36\pi~{\rm in}^3$ . What is the cone's height, in inches?

The volume of a cone is given by:

$$V=rac{1}{3}\pi r^2 h$$

#### **Options:**

- A) 6
- B) 9
- C) 12
- D) 18
- E) 24

## **Revised Question with Correct Options**

Let the function f(x) be defined as:

$$f(x) = 2x^2 + 3x - 7$$

Which of the following expressions is equivalent to f(a-2)?

# **Options:**

- A)  $2a^2-5a+9$
- B)  $2a^2 5a 5$
- C)  $2a^2-8a+13$
- D)  $2a^2-5a-7$
- E)  $2a^2-8a+9$

$$\sqrt{\frac{81}{9}}+\sqrt{\frac{64}{16}}$$

$$\sqrt{\frac{144}{16}} + \sqrt{\frac{64}{25}}$$

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