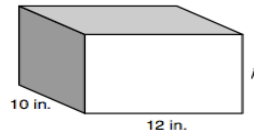


A1 SOL Packet #2b Formulas

Algebra 1 SOL Released Questions:

Formulas

The volume of a rectangular solid is 960 cubic inches. The dimensions of the base are 12 inches by 10 inches.



What is the height of the solid?

- A 4 in.
- B 8 in.
- C 120 in.
- D 840 in.

2004

The formula for the surface area of a cylinder is $SA = 2\pi r(h + r)$. What is the value of SA when $r = 3$ centimeters and $h = 4$ centimeters?

- A $28\pi \text{ cm}^2$
- B $32\pi \text{ cm}^2$
- C $36\pi \text{ cm}^2$
- D $42\pi \text{ cm}^2$

2004

The volume of a cylinder is given by

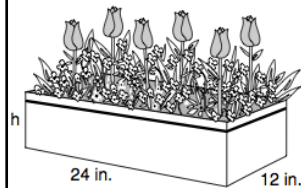
$$V = \pi r^2 h$$

where r is the radius of the cylinder and h is the cylinder's height. Which equation could be used to solve for h ?

- A $h = \pi r^2 V$
- B $h = \frac{V}{\pi r^2}$
- C $h = V + \pi r^2$
- D $h = V - \pi r^2$

2003

A rectangular planter can hold 2,304 cubic inches of soil. The dimensions of the base of the planter are 24 inches by 12 inches.



What is the height of the planter?

- F 4 inches
- G 8 inches
- H 16 inches
- J 192 inches

2002

Using the distance formula, $d = rt$, what is the value of t when $d = 3,520$ and $r = 550$?

- A 6.4
- B 2,970
- C 4,070
- D 1,936,000

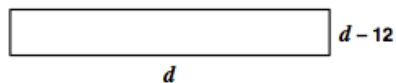
2000

A1 SOL Packet #2b Formulas

Algebra 2 SOL Released Questions:

Quadratic Formulas

The dimensions of a rectangle are shown in the drawing below.



If the area is 28 square units, what is the value of d ?

- A 2 units
- B 7 units
- C 12 units
- D 14 units

2002

A weather balloon in the shape of a sphere has a surface area of 160 square meters. If the formula for the surface area of a sphere is $S.A. = 4\pi r^2$, to the nearest tenth of a meter, what is the radius of the balloon?

- A 2.0 m
- B 3.6 m
- C 11.2 m
- D 12.7 m

2001

Which measure is closest to the length of a side of a square that has an area of 221 square feet?

- F 11.0 ft
- G 14.9 ft
- H 16.4 ft
- J 55.2 ft

2004