

SOL HW 1.5C

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Name: _____

Date: _____

Math 8: Section 1.5 Problems for Squares and Square roots:

The value of $10^2 + 10 + 1$ is

- (A) 101 (B) 1035 (C) 1011 (D) 111 (E) 31

The value of $9^2 - \sqrt{9}$ is

- (A) 0 (B) 6 (C) 15 (D) 72 (E) 78

The value of $(2^3)^2 - 4^3$ is

- (A) 0 (B) -8 (C) 4 (D) 10 (E) 12

The value of the expression $5^2 - 4^2 + 3^2$ is

- (A) 20 (B) 18 (C) 21 (D) 10 (E) 16

The value of $\sqrt{9 + 16}$ is

- (A) 5.2 (B) 7 (C) 5.7 (D) 25 (E) 5

How many even whole numbers lie between 3^2 and 3^3 ?

- (A) 9 (B) 4 (C) 6 (D) 10 (E) 17

A square has a perimeter of 28 cm. The area of the square, in cm^2 , is

- (A) 196 (B) 784 (C) 64 (D) 49 (E) 56

Two squares, each with an area of 25 cm^2 , are placed side by side to form a rectangle. What is the perimeter of this rectangle?

- (A) 30 cm (B) 25 cm (C) 50 cm (D) 20 cm (E) 15 cm

The perimeter of a square is 36 cm. The area of the square, in cm^2 , is

- (A) 24 (B) 81 (C) 36 (D) 1296 (E) 324

A cube has a volume of 125 cm^3 . What is the area of one face of the cube?

- (A) 20 cm^2 (B) 25 cm^2 (C) $41\frac{2}{3} \text{ cm}^2$ (D) 5 cm^2 (E) 75 cm^2

In the following equations, the letters a , b and c represent different numbers.

$$1^3 = 1$$

$$a^3 = 1 + 7$$

$$3^3 = 1 + 7 + b$$

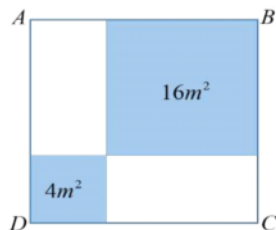
$$4^3 = 1 + 7 + c$$

The numerical value of $a + b + c$ is

- (A) 58 (B) 110 (C) 75 (D) 77 (E) 79

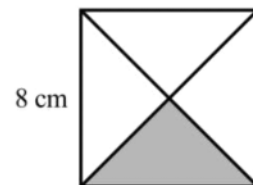
$ABCD$ is a square that is made up of two identical rectangles and two squares of area 4 cm^2 and 16 cm^2 . What is the area, in cm^2 , of the square $ABCD$?

- (A) 64 (B) 49 (C) 25 (D) 36 (E) 20



The diagonals have been drawn in the square shown. The area of the shaded region of the square is

- (A) 4 cm^2 (B) 8 cm^2 (C) 16 cm^2
 (D) 56 cm^2 (E) 64 cm^2



Two squares, each with side length 5 cm, overlap as shown. The shape of their overlap is a square, which has an area of 4 cm^2 . What is the perimeter, in centimetres, of the shaded figure?

- (A) 24 (B) 32 (C) 40
 (D) 42 (E) 50

