Topic: Radicals

Question: Simplify the radical expression.

$$\sqrt{100}$$

Answer choices:

A 10

B 20

C -10

D 25

Solution: A

We know that

$$(10)(10) = 100 = (-10)(-10)$$

Remember that $\sqrt{100}$ means the positive number that when multiplied by itself gives 100, so

$$\sqrt{100} = 10$$

Topic: Radicals

Question: Simplify the radical expression.

$$\sqrt[3]{-64}$$

Answer choices:

A -8

B 4

C -4

D 6

Solution: C

We know that

$$(-4)(-4)(-4) = (16)(-4) = -64$$

Because this is a cube root, there's only one number that, when multiplied by itself 3 times, gives -64. This tells us that

$$\sqrt[3]{-64} = -4$$

Topic: Radicals

Question: Simplify the radical expression.

$$\sqrt{225}$$

Answer choices:

A   15

B   20

C   22

D   25

Solution: A

We know that

$$(15)(15) = 225 = (-15)(-15)$$

Remember that $\sqrt{225}$ means the positive number that when multiplied by itself gives 225, so

$$\sqrt{225} = 15$$