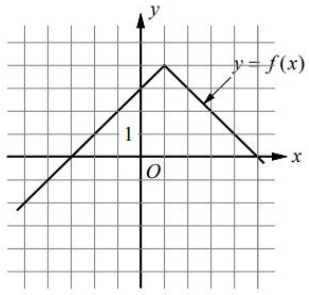
SSAT 数学最后几层窗户纸 IX

The graph of the function f is shown in the xy - plane above, tell me the value of f(10), f(-20)



−2, 0, 2, 0, −2, 0, 2, 0, ...

In the sequence above, −2 is the first term. If the pattern −2, 0, 2, 0 repeats itself indefinitely, which of the following terms has a value of −2 ?

a. 30th , b. 31st, c. 32nd, d. 33rd e. 34th 提示： 结果不是 32

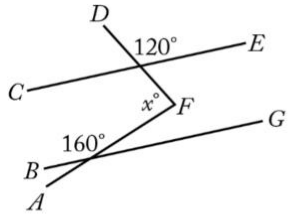
In the xy-coordinate plane, if point $P(4,\ 3)$ is reflected across the y-axis and then translated down 5 units, what are the coordinates of the resulting point?

$\sqrt{8}+\sqrt{18}$?

What is the least common multiple of 6, 10, and 28 ?

Question: A rectangular garden has a length of 10 meters and a width of 5 meters. The garden is being redesigned, and the dimensions will be converted to centimeters.

1. What will be the new length and width of the garden in centimeters?
2. If the area of the garden is to be doubled after the transformation, what should the new length and width be in centimeters?



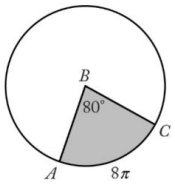
In the figure, segments $\overline{AF}$, $\overline{BG}$, $\overline{CE}$, and $\overline{DF}$ intersect as shown. If $\overline{BG} \parallel \overline{CE}$, what is the value of x ?

Simplify: $\left(x^{\frac{1}{2}}\right)^3\left(x^3\right)^{-\frac{1}{2}}$ for $x > 0$

Which of the following could be the length of the sides of a triangle?

a. 4, 4, 8
b. 2,3,6
c. 7,7,20
d. 5,5,8

Let the functions f and g be defined as $f(x) = 9 - x$ and $g(x) = 3x^2$. If $g(-2) = k$, what is the value of $f(k)$?



Point B is the center of the circle shown, and the length of arc $\overset{\frown}{AC}$ is 8π. What is the radius of the circle?

来尝试几个幂的计算:

(1) $3^{3^2} - 1^{1000000} + 0^{2024} =$

(2) $4^{3.1} / 4^{2.6} =$

(3) $\dfrac{4^3 * 4^2}{2^{-2}} =$