



Daily Warm-Ups

SAT PREP— MATH

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Level II

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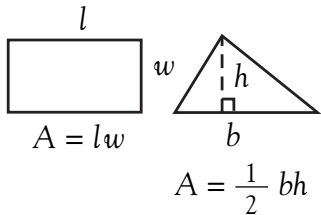
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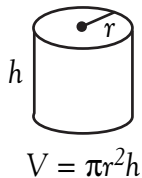
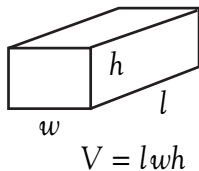
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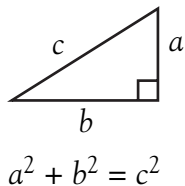
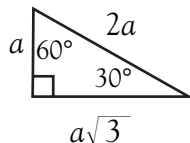
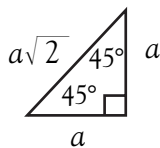
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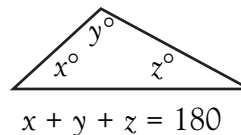
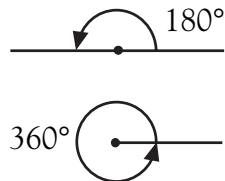
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Triangle Facts



Angle Facts





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Numbers and Operations

Martha is dividing cookies into packages. If she puts 5 cookies in each package, she will make 33 packages with no cookies left over. If instead she puts 3 cookies in each package, how many packages can she make?

- (A) 11
- (B) 41
- (C) 55
- (D) 99
- (E) 165

(A) (B) (C) (D) (E)



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Numbers and Operations

The weight of 80 screws in a jar of identical screws is 2 ounces.
What is the weight, in ounces, of 4 screws?

- (A) 0.05
- (B) 0.1
- (C) 0.5
- (D) 1
- (E) 10



- (A)
- (B)
- (C)
- (D)
- (E)



Numbers and Operations

Maggie collects marbles. She has one jar filled with 50 marbles and 4 jars each filled with 30 marbles. How many marbles does Maggie have in total?

- (A) 80
- (B) 150
- (C) 170
- (D) 230
- (E) 250



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- (A)
- (B)
- (C)
- (D)
- (E)



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Numbers and Operations

What is the smallest four-digit integer that has a factor of 7?

•	÷	÷	•
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9



Algebra and Functions

The denominator of a certain fraction is 9 more than its numerator. If the fraction is equal to $\frac{2}{5}$, what is the denominator of this fraction?

- (A) 4
- (B) 6
- (C) 10
- (D) 15
- (E) 20



- (A) (B) (C) (D) (E)



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Algebra and Functions

If a and b are inversely proportional, and $a = 7$ when $b = 6$, what is a when b is 21?

- (A) 2
- (B) 13
- (C) 18
- (D) 20
- (E) 42

(A) (B) (C) (D) (E)

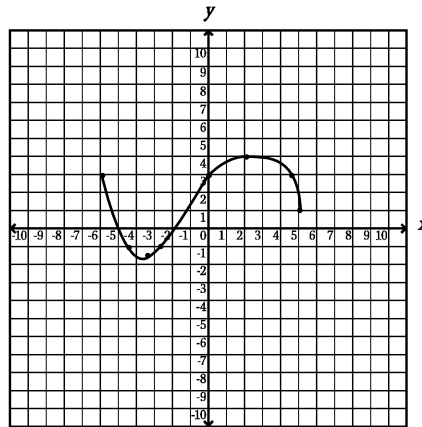


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Algebra and Functions



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The graph of $y = f(x)$ is shown above. All of the following statements about this graph are true EXCEPT

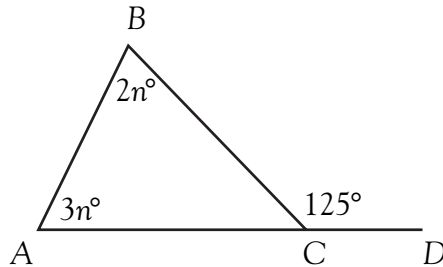
- (A) The domain of the function is the interval from $x = -6$ to $x = 5$.
- (B) The range of the function is the interval from $y = -1.5$ to $y = 4$.
- (C) $f(x) = 3$ for 3 values of x .
- (D) $f(x) = -1$ for 1 value of x .
- (E) There are 2 zeros for the function f .

(A) (B) (C) (D) (E)



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Geometry and Measurement



In the figure above, what is the measure of angle A?

- (A) 25°
- (B) 50°
- (C) 55°
- (D) 75°
- (E) 100°

(A) (B) (C) (D) (E)



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Geometry and Measurement

A square has an area of 36 square feet. Its length is increased by 4 feet and its width is decreased by 2 feet to create a rectangle. What is the area of this rectangle in square feet?

- (A) 28
- (B) 38
- (C) 40
- (D) 52
- (E) 64



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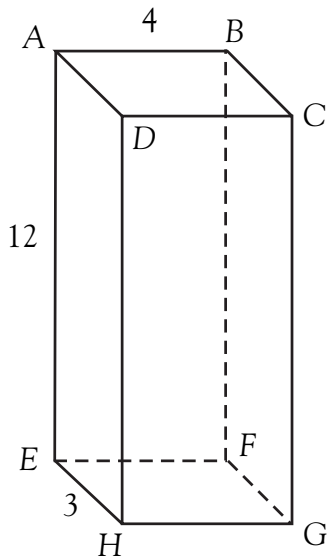
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- (A) (B) (C) (D) (E)

Geometry and Measurement

The figure at the right represents a rectangular prism with height 12, length 3, and width 4. What is the distance between points B and H ?

- (A) $\sqrt{153}$
- (B) $4\sqrt{10}$
- (C) 13
- (D) 15
- (E) It cannot be determined from the information given.



- (A) (B) (C) (D) (E)

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Geometry and Measurement

The diameter of circle A is 9 times as great as the diameter of circle B. The area of circle A is how many times as great as the area of circle B?

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1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9



Data Analysis, Statistics, and Probability

What is the average of x , $x + 1$, $x - 1$, and 0 ?

- (A) $\frac{x}{3}$
- (B) $\frac{3x}{4}$
- (C) x
- (D) $x + \frac{1}{4}$
- (E) $2x$



- (A)
- (B)
- (C)
- (D)
- (E)



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Data Analysis, Statistics, and Probability

There are 20 marbles in a jar. If the probability of selecting a blue marble is $\frac{2}{5}$, how many marbles in the jar are NOT blue?

- (A) 2
- (B) 4
- (C) 8
- (D) 12
- (E) 16

(A) (B) (C) (D) (E)



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Data Analysis, Statistics, and Probability

If the median of a set of numbers is 25, which of the following must be true?

- I. The number 25 appears in the set more than any other.
 - II. At least one of the numbers in the set is 25.
 - III. No more than half the numbers in the set are greater than 25.
- (A) II only
(B) III only
(C) I and III only
(D) II and III only
(E) I, II, and III

(A) (B) (C) (D) (E)



Data Analysis, Statistics, and Probability

A jar can hold a maximum of 150 pieces of taffy. The probability of selecting an orange piece of taffy from the jar is $\frac{1}{5}$, and the probability of selecting a lemon piece is $\frac{1}{3}$. If there are at least 100 pieces of taffy in the jar, what could be the total number of pieces in the jar?

●	○	○	●
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

