

SAT Practice

02-13-2018

SAT Think Pair Share Instructions

- You have **90 seconds** to **independently** think about each question
- Answer the questions in **bellwork/SAT prep** of your notebook.
- You DO NOT have to write down the question, just your answer (Ppt will be on the blog)
- After the **timer is up**, **share** your answer with your elbow partner. If you did not have the same answer, you should try to convince each other before you **share your white board answer with the class**.
- Numbers will be picked randomly for students to come up on the board and share **their work/Thinking Process** with the class.

SAT Practice Question 1 NC

Which of the following equations represents a line that is parallel to the line with equation $y = -2x - 6$?

- $ax + by = c$
- A.) $4x - 2y = 6$
- B.) $2x - y = 5$ $\frac{-2}{-1} = 2$ 100%
- C.) $4x + 2y = 8$
- D.) $x + 2y = 4$ $-\frac{a}{b} = -\frac{1}{2}$

SAT Practice Question 2 NC

The line $y = kx + 6$, where k is a constant, is graphed in the xy -plane. If the line contains the point (f, g) , where $f \neq 0$ and $g \neq 0$, what is the slope of the line in terms of f and g ?

- A.) $\frac{6-f}{g}$
- B.) $\frac{g-6}{f}$
- C.) $\frac{f-6}{g}$
- D.) $\frac{6-g}{f}$

$g = kf + 6$
 $g - 6 = kf$
 $\frac{g-6}{f} = k$

SAT Practice Question 3 NC

If $\frac{2}{5}x - \frac{1}{5}x = \frac{1}{3} + \frac{1}{2}$, what is the value of x ?

$\frac{2}{5}x - \frac{1}{5}x = \frac{1}{3} + \frac{1}{2}$
 $\frac{1}{5}x = \frac{2}{6} + \frac{1}{2}$
 $\frac{1}{5}x = \frac{2}{6} + \frac{3}{6}$
 $\frac{1}{5}x = \frac{5}{6}$
 $x = \frac{25}{6}$

SAT Practice Question 4 NC

For $i = \sqrt{-1}$, what is the sum $(9 + 6i) + (-12 + 8i)$?

- A.) $-3 - 2i$
- B.) $21 + 14i$
- C.) $-3 + 14i$
- D.) $21 - 2i$

$(9 + 6i) + (-12 + 8i)$
 $-3 + 14i$

SAT Practice Question 5 NC

$(2x^2y - 4y^2 + 6xy^2) - (-x^2y + 2xy^2 - 5y^2)$
 Which of the following is equivalent to the expression above?

- A.) $8x^2y^2$
- B.) $3x^2y + y^2 + 4xy^2$
- C.) $3x^2y - 9y^2 + 8xy^2$
- D.) $-5x^2y^2 + y^2$

$2x^2y - 4y^2 + 6xy^2 + x^2y - 2xy^2 + 5y^2$
 $3x^2y - 9y^2 + 8xy^2$

SAT Practice Question 6 NC

If $\frac{a}{b} = 4$, what is the value of $\frac{7b}{a}$?

- A.) 1.00
- B.) 1.25
- C.) 1.50
- D.) 1.75

$\frac{a}{b} = 4$
 $\frac{7b}{a} = \frac{7}{4}$
 1.75

SAT Practice Question 7 Calc

If $y = kx$, where k is a constant, and $y = 18$ when $x = 6$, what is the value of y when $x = 2$?

- A.) 6
- B.) 12
- C.) 18
- D.) 32

$18 = 6k$
 $3 = k$
 $y = 3x$
 $y = 6$ when $x = 2$

SAT Practice Question 8 **Calc**

For what value of n is $|n - 2| + 2$ equal to 0 ?

- A.) 0
- B.) 2
- C.) 4
- D.) There is no such value of n .

SAT Practice Question 9 **Calc**

Which of the following numbers is NOT a solution of the inequality $21x + 4 > -4x + 58$?

- a.) 2.16
- b.) 2.17
- c.) 2.18
- d.) 2.19

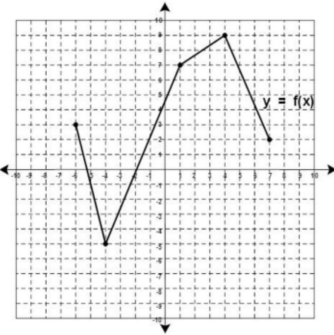
SAT Practice Question 10 **Calc**

$h = -4.9t^2 + 25.4t$

The equation above expresses the approximate height h , in meters, of a ball t seconds after it is launched vertically upward from the ground with an initial velocity of 25.4 meters per second. After approximately how many seconds will the ball hit the ground?

- A.) 3.5
- B.) 4.0
- C.) 4.5
- D.) 5.0

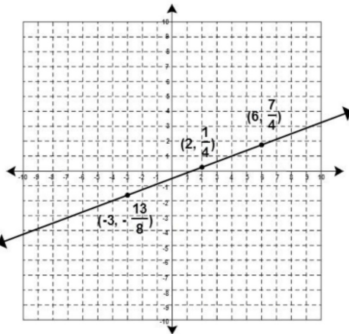
SAT Practice Question 11 **Calc**



The complete graph of the function f is shown in the xy -plane above. For what value of x is the value of $f(x)$ at its minimum?

- A.) -6
- B.) -4
- C.) 7
- D.) 9

SAT Practice Question 12 **Calc**



What is the slope of line t ?

SAT Practice Question 13 **Calc**

x	$f(x)$
1	-6
3	0
5	6

Some values of the linear function f are shown in the table above. Which of the following defines f ?

- A.) $f(x) = 2x - 9$
- B.) $f(x) = 2x + 9$
- C.) $f(x) = 3x + 9$
- D.) $f(x) = 3x - 9$

SAT Practice Question 14 **Calc**

$\frac{1}{3}y = 6$
 $x - \frac{1}{4}y = 2$

What is the value of x ?

- A.) 4
- B.) 5
- C.) 6.5
- D.) 7.5

SAT Practice Question 15 **Calc**

If $\frac{3}{4}m = \frac{5}{8}$, what is the value of m ?

- A.) $\frac{5}{6}$
- B.) $\frac{15}{32}$
- C.) $\frac{6}{5}$
- D.) $\frac{32}{15}$

