



ثانوية التكنولوجيا التطبيقية
Applied Technology High School

SAT I**2012 / 2013**

Question booklet # 5

Grade	12
Cluster	Core
Subject	Mathematics

Student Name			
Student Number		Section	

Coverage	<p>➤ SAT I, basic reasoning questions.</p>
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1. If $3x - 5 = 4$, what is the value of $8x - 16$?
- 2
 - 4
 - 8
 - 12
 - 15
-
2. In the x-y coordinate plane, which of the following ordered pairs is a point on the line $y = 2x - 8$?
- (6,5)
 - (6,6)
 - (7,6)
 - (7,7)
 - (8,7)
-
3. If $f(3) = 4$ and $f(4) = 11$ then which of the following could be $f(x)$?
- $x + 1$
 - $2x - 2$
 - $3x - 1$
 - $x^2 + 1$
 - $x^2 - 5$
-
4. If 4 more than x is 2 more than y, what is x in terms of y?
- $y - 2$
 - $y - 6$
 - $y + 2$
 - $y + 5$
 - $y + 6$
5. If $3a + 5b + c = 20$, $b + c = 7$, and $c = 6$, What is the value of $a + b + c$?
- 4
 - 8
 - 10
 - 12
 - 24
-
6. Seventy students went on a class trip, if there were fourteen more boys than girls on the trip, how many girls were on the trip?
- 21
 - 28
 - 35
 - 42
 - 61
-
7. Which of the following is equal to $6x + 9y + 15$?
- $6(x + 9y + 15)$
 - $3(2x + 3y) + 15$
 - $3(2x + 3y) + 5$
 - $3(3x + 6y + 12)$
 - $6x(3y + 5)$
-
8. $\sqrt{x} + 22 = 36$ then the value of x is
- 0
 - $\sqrt{14}$
 - 14
 - 196
 - 256

9. For which of the following values of x is 49^x equal to 7?

- a. $\frac{1}{2}$
- b. $\frac{2}{3}$
- c. 1
- d. $\frac{3}{2}$
- e. 2

10. If 45 % of p is equal to 900 what is 60 % of p ?

- a. 105
- b. 120
- c. 1200
- d. 1500
- e. 2000

11. If the perimeter of a square is 36 , what is the length of the diagonal of the square ?

- a. $2\sqrt{18}$
- b. 18
- c. $9\sqrt{3}$
- d. $9\sqrt{2}$
- e. $36\sqrt{2}$

12. If Jayme will be j years old in 2 years, then in terms of j how old was Jayme 5 years ago?

- a. $j - 7$
- b. $j - 5$
- c. $j - 2$
- d. $j + 5$
- e. $j + 7$

13. A baseball team won 48 more games than it lost, if the team played a total of 148 games and there were no ties, how many games did the team win?

- a. 50
- b. 98
- c. 100
- d. 102
- e. 104

14. A dress is selling for \$ 200 after a 20 % discount. What was the original selling price?

- a. \$ 100
- b. \$ 160
- c. \$220
- d. \$225
- e. \$250

15. If $a - b$ is a multiple of 5. which of the following must be a multiple of 5

- a. ab
- b. $a + b$
- c. $\frac{a+b}{2}$
- d. $\frac{b-a}{2}$
- e. $b - a$

End of Practice sheet five