

UB SAT 2009
Worksheet #3
Algebra Review

Translate the words into numbers, symbols, expressions, and/or equations, and then find the particular solution.

1. What is 30 percent of 20?
2. 2 more than what is 5?
3. What is 20 less than the product of 5 and 12?
4. $\frac{2}{3}$ of what is 10?
5. What is 6 more than the quotient of 30 and 5?
6. If x is 4 more than the product of y and 5, what is the value of x when y equals 2?
7. If 10 percent of x is 50, what is x ?
8. If the sum of a number and 5 is 21, what is that number?
9. 12 less than the product of a number and 3 is 5 times that same number, what is that number?
10. 8 more than twice a number is 14, what is that number?
11. If 20 percent of the product between 10 and y is 8, what is the value of y ?
12. If $\frac{1}{4}$ of a number is 4, what is that number?
13. What is 10 percent of 50 percent of x , if x equals 20?

14. After x is increased by 22, then halved, and finally decreased by 4, the result is 12. What is the value of x ?
15. If 30 more than 25 percent of x is 20 less than 75 percent of x , what is the value of x ?
16. What is the value of y , if 5 percent of the product of 20 and y is equal to 13?
17. If x percent of x is 9, what is the value of x ?
18. The sum of three consecutive integers is 51, what are the three integers?

SAT practice: real sample SAT problems for past tests from the book 10 Real SATs.

- 19 The number p is 4 more than 3 times the number r . The sum of p and r is 10. Which of the following pairs of equations could be used to find the values of p and r ?
- (A) $p = 3r + 4$
 $p + r = 10$
- (B) $p = 3r + 4$
 $pr = 10$
- (C) $p = 3(r + 4)$
 $p + r = 10$
- (D) $p + 4 = 3r$
 $p + r = 10$
- (E) $p + 4 = 3r$
 $pr = 10$

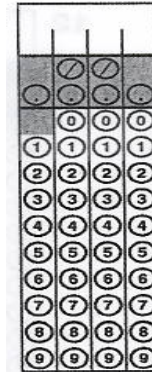
20. What percent of 4 is 5?

- (A) 75%
- (B) 80%
- (C) 125%
- (D) 150%
- (E) 180%

21. The sum of k and $k + 1$ is greater than 9 but less than 17. If k is an integer, what is one possible value of k ?



22. If the sum of two numbers is 2 and their difference is 1, what is their product?



23. What number decreased by 6 equals 3 times the number?

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

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Answers

1. 6

2. 3

3. 40

4. 15

5. 12

6. 14

7. 500

8. 16

9. -6

10. 3

11. 4

12. 16

13. 1

14. 10

15. 100

16. 13

17. 30

18. 16, 17, 18

19. A

20. C

21. 5, 6, or 7

22. 0.75

23. A