SAT Focused Practice Worksheet 6- Algebra –
Work-Writing Equations-Solving Equations-Real Numbers

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Last week Rashed worked 5 more hours than Omar. If the two men worked a total of 77 hours last week, which equation could be used to find the number of hours Rashed worked?

a. $y - 5 = 77$

b. $y + (y + 5) = 77$

c. $y - (y + 5) = 77$

d. $y + (y - 5) = 77$

e. $y + 5 = 77$

____ 2. What is the solution to the equation $4x = 2(3x - 5) - 2$?

a. −4

b. −1.2

c. 3.5

d. 4

e. 6

____ 3. If the product of *x* and 6 is equal to 3 times the sum of *x* and −2, then *x* =

a. −2

b. $-\frac{2}{3}$

c. $-\frac{2}{5}$

d. $\frac{2}{3}$

e. 1

____ 4. A television repair technician charges $25 plus $32 per hour to fix televisions and VCRs. The total bill for fixing a large-screen television was $121. Which equation below will determine the number of hours the technician worked on the television?

a. $25x + 32 = 121$

b. $(25 + 32)x = 121$

c. $121 - 25x = 32$

d. $25 + 32x = 121$

e. $57x = 121$

____ 5. The sum of two positive even integers is *x*. In terms of *x*, what is the value of the greater of these two integers?

a. $\frac{x-1}{2}$

b. $\frac{x}{2} + 1$

c. $\frac{x}{2}$

d. $\frac{x+1}{2}$

e. $\frac{x}{2} - 1$

6. The Henry family drove x miles at y miles per hour to visit a zoo. They spent z hours at the farm and then drove back at the same speed. How many hours were they gone?

a. $\dfrac{2y}{x}+z$ d. $\dfrac{2x+z}{y}$

b. $\dfrac{2x}{y}+z$ e. $\dfrac{x+1}{2}$

c. $2xy+z$

7. If $\dfrac{3+x}{7+x}=\dfrac{3}{7}+\dfrac{3}{7}$, then $x = ?$

a. 14   d. 7

b. 3   e. 21

c. 0

8. Tran has no more than 6 quarters, 14 dimes, 4 nickels, and 30 pennies in her bank. If she has half as many quarters as dimes, three times as many pennies as quarters, and one third as many nickels as pennies, what is the greatest amount of money she could have in her bank?

a. $2.38   d. $3.18

b. $2.52   e. $3.40

c. $2.12

9. $\dfrac{(ab)^2 b^3}{a^2 b} = ?$

a. $\dfrac{1}{ab^2}$ d. b^4

b. $\dfrac{a^4}{b^4}$ e. $\dfrac{b^4}{a}$

c. b^3