

# *The City School*

North Nazimabad Boys Campus

Grade 7

Mathematics

Teacher: Ms. Hira Asad

Topic: Substitution

Name: \_\_\_\_\_ Section: \_\_\_\_\_ Date: \_\_\_\_\_

1. Use the formula  $D = ST$  to work out the value of

a.  $D$  when  $S = 50$  and  $T = 3$

\_\_\_\_\_

b.  $T$  when  $D = 22$  and  $S = 4$

\_\_\_\_\_

c.  $S$  when  $D = 100$  and  $T = 5$

\_\_\_\_\_

2. Stanley is  $d$  years old. Polly is 9 years older than Stanley.

a. Write an expression for Polly's age in terms of  $d$ .

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b. Write a formula for the total age,  $T$ , of Stanley and Polly.

\_\_\_\_\_

c. Use your formula in part b to work out the value of  $T$  when  $d = 8$ .

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d. Rearrange your formula in part c to make  $d$  the subject.

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e. Use your formula in part d to work out the value of  $d$  when  $T = 27$ .

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3. Calculate the value of  $a - b$  when  $a = \frac{1}{2}$  and  $b = -\frac{1}{2}$

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