Towheed Iranian School

FirstTerm, Final Exams, 2015-2016

Mark
50

Subject: Mathematics

Date: / /2015

Name: _____ Grade:7, Section: A , D

Exam time: 80 mins

1) Translate each phrase into algebraic expressions (2 marks)

a) Six times a number minus nine _____

b) Three times the sum of four and a number _____

c) Some number added to eighty six _____

d) the product of sixty nine and a number _____

2)Simplify each expression (4 marks)

a) (15 + *n*) + 6

b) 8 (4m) + 11

c) 12 (*x* + 4)

d) 15 (n +2m)

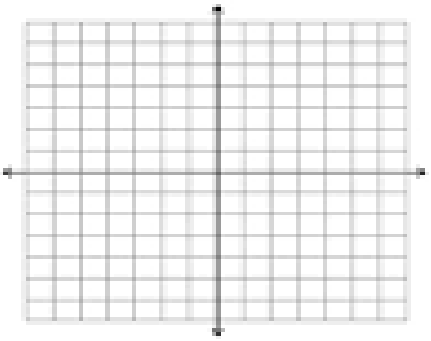
3) Graph each ordered pair on the coordinate plane (1 mark)

A (-3 , 3)

B (-1 , 4)

C (-5, 0)

D (0 , 3)



4) Find the domain and range of the relation and identify whether it is function or not (1mark)

{(7,5), (3 , -2), (6,4), (-5 ,2)}.

D: R:

6)Translate each sentence into an equation. Then find each number (3 marks)

a) Five more than 6 times a number is -7.

b) The product of 5 and the sum of a number and 2 is 50

7)Evaluate each expression if a= -6 and b= 3 and c = 15 (4 marks)

a.10ab = b. 5c-a =

c . $\frac{-360}{bc}$ d. 2a – (– 12) =

8) Identify the like terms in 16+ 9j – j + 1. (1 mark)

9) Simplify the following expressions : (2 mark)

a) 6p + 10 + 8p -15 = b) 4(2y +5) - 3 (3y - 6) =

10) Evaluate –7 – $|y|$ + 3 if y = –6 (1 mark)

11) Evaluate each expression. **(2 marks)**

a) 10 (15-5) – 3(9 +7) =

b) 3 [4 + (7 – 1) ÷ 3]

12) Solve the equations : (showing your working) **(6 marks)**

a) 4x + 24 = 60

b) $\frac{6x}{18}$ = 4

c) 4 - 9c +8c = 58

d) -7 - 8d = 17

13) write each decimal as a fraction or mixed number in simplest form. **(2 marks)**

1) 0.206 =

2) $0.\overline{42}$ =

14) Find each product or quotient. Write in simplest form. **(2 marks)**

1) $15 \times 2\frac{1}{6}$

2) $2\frac{13}{8} \div 1\frac{1}{6}$

15) Find each sum or difference. Write in simplest form. **(3 marks)**

1) $2\frac{2}{7} - 1\frac{3}{14}$

2) $\frac{6}{15} + \frac{4}{5}$

16) Problem solving : (any 4) **(8 marks)**

1) In a school $\frac{2}{5}$ of students are in library and $\frac{3}{8}$ of them are in play field . What fraction of the students are in classes?

2) Maria purchased the items shown in the table.

Write an expression to show the total cost of the items._____

Suppose the cost of the book is $50. How much did she spend in all.

Item	price
Shirt	x
Pants	x+10
Bag	2x -5

3) To rent a house we have to pay $500 as a deposit and $ 120 per month .Write an **expression** to show how much shall we pay if we want to rent the house for 1 year .

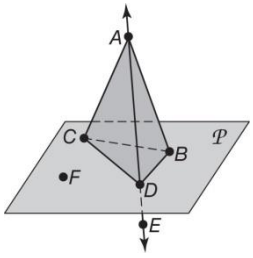
4) During 6 days of May, the lowest temperature in the United States was recorded in several towns in Alaska. Find the **average** of these low temperatures:
8°F, –1°F, –5°F, 12°F, 8°F, and 14°F,

5) Four pieces of wood each $12\frac{3}{5}$ inches long are required for building a cabinet. If all four pieces are cut from one board, how long should the board be?

17)Find the distance between A(–2, 1) and B(4, –3). (3 marks)

18) Find the value of x if S is between R and T, RS is x + 3, ST is 5x, and RT is 57. (2 marks)

For Exercises 18 and 19, use the figure at the right. (2marks)



18) Which three points in the figure are collinear?

F *C*, *D*, *F* **G** *A*, *E*, *F* **H** *B*, *C*, *D* **J** *A*, *D*, *E*

19) Name the intersection of the plane that contains points A, B, and D and the plane P.

A. point *D* **B.** triangle *BCD* **C.** $\overline{AD}$ **D.** $\overleftrightarrow{BD}$

20) Find the length of $\overline{XY}$. (1 mark)

F. $1\frac{11}{16}$ in. **G.** $1\frac{5}{8}$ in. **H.** $1\frac{9}{16}$ in. **J.** $1\frac{1}{2}$ in.