Task Title: Pre-Admissions Testing Sample Questions: Fractions, Decimals, Percents

OALCF Cover Sheet – Learner Copy

Learner Name: _____

Date Started: _____

Date Completed: _____

Successful Completion: Yes ☐ No ☐

Goal Path: Employment ☐ Apprenticeship ☒

Secondary School ☒ Post Secondary ☒ Independence ☐

Task Description: The learner will answer fraction, decimal and percent questions from a sample college mathematics pre-admission test used to prepare students for a post-secondary mature applicant test.

Main Competency/Task Group/Level Indicator:

- Understand and Use Numbers/Manage money/C1.2
- Understand and Use Numbers/Use measures/C3.2

Materials Required:

- Pen/pencil and paper and/or digital device
- Calculator or digital device with calculator function

Learner Information

The Secondary School Credit, Post Secondary and Apprenticeship goal paths require learners to complete math question sheets for class and on tests and exams.

Scan the "Mohawk College Pre-Admission Testing Sample Questions – Comprehensive Technical Math" pages.

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PRE-ADMISSION TESTING SAMPLE QUESTIONS - COMPREHENSIVE TECHNICAL MATH

Topic 1: Fractions

1) Reduce $\frac{9}{36}$
2) Convert this fraction into a mixed number in lowest terms $\frac{60}{25}$
3) Find the Least Common Denominator of $\frac{1}{3}, \frac{1}{15}, \frac{1}{9}$
4) Two pins measure $\frac{3}{6}$ and $\frac{4}{9}$
   a) What is the length of the larger pin?
   b) What is the length difference between the two pins?
5) Add the fractions and bring your answer to lowest terms $\frac{1}{5}+\frac{1}{10}+\frac{1}{6}$
6) Add $2\frac{1}{2}+\frac{1}{4}+\frac{1}{5}$
7) Add $4\frac{1}{3}-1\frac{1}{7}$
8) Multiply $4\frac{2}{9}\times 1\frac{1}{6}$
9) Divide $3\frac{1}{2}\div 1\frac{2}{3}$
10) Simplify $\frac{9\frac{3}{4}+\frac{1}{5}}{\frac{5}{8}}$
11) Find the value of x given $\frac{x}{23}=\frac{15}{3}$

Topic 2: Decimals

1) Divide 1.3289 by 0.431 and round to three decimal places
2) Convert $158\frac{3}{5}$ to a decimal. Round to one decimal place.
3) Convert 11.78 to a mixed fraction
4) Evaluate 2,300 + 3.13 + 1.09. Round to one decimal place.
5) Evaluate 1.35 – 26.491 + 11.7. Round to three decimal places.
6) Evaluate 0.6 x 12.34 x 1.4. Round to two decimal places.
7) Divide 1.113 by 0.56. Round to three decimal places
8) Determine the volume of an aquarium with these definitions:
   Length = 78 cm; Width = 6 cm; Height = 43 cm
9) Bob makes $888.87 per week before deductions. The following deductions are made from his paycheque: Income Tax $124.00; Company Pension $42.86; C.P.P. $38.97; and Dental Plan = $31.97.
   What are his total Deductions? What is his take-home pay?
10) Determine how much change you would get from $100 if you purchased 31.9 litres of gas at a cost of 96.7 cents per litre.

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Topic 3: Percents

1) Express the following as percents:

Decimal	Percent
a) 0.62	
b) 3.312	
c) 13	

2) Express the following percents as decimals:

Percent	Decimal
a) 79 %	
b) 317.2 %	
c) $14\frac{1}{3}$ %	

3) Express the following fractions as percents:

Fraction	Percent
a) $\frac{887}{962}$	
b) $\frac{14}{100}$	
c) $7\frac{7}{14}$	

4) Express the following percents in fractional form in lowest terms:

Percent %	Fraction Form
a) 86 %	
b) 52 %	
c) $7\frac{1}{2}$ %	

5) Determine $89\frac{1}{2}$ % of $ 3,633 rounded to the nearest cent.

6) 316 kg is 15% of what measurement?

7) Helmer Co. Produces 1,090 DVD's per year. If 1.4% of these are defective, how many defective DVD's are produced per year? Round your answer to the nearest whole number.

8) Mohawk Digital Centre sells webcams for $120 each. In an attempt to increase profit they increased the price by $5.81. Express this increase as a percent of the original price.

9) Mohawk Digital Centre sells digital cameras for $390.45 each. In an attempt to increase sales they reduced the price by 2%. What is the new price after the reduction?

Work Sheet

Task 1: On a separate sheet of paper, and showing your calculations, answer all the Mohawk College Pre-Admission Testing Sample Questions.

Answer: No answers required here.

Task Completed: Yes ☐ No ☐