Mathematics Essentials 10

Outcomes

NOVA SCOTIA
NOUVELLE-ÉCOSSE

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Mathematics Essentials 10 Outcomes

A1 understand purchasing power
A2 explain the difference between gross pay and net pay, and describe possible payroll deductions
A4 identify and explain the advantages and disadvantages of various plans to make purchases
A5 understand transactions such as depositing, transferring and withdrawing money, writing cheques and withdrawing money
A6 understand what interest is and how interest is calculated by a bank
A7 recognize and find equivalencies among common fractions and percent
A8 compare and order common fractions and percentages
A9 rename common fractions
A10 round rational numbers and percentages in contexts
A11 describe the procedures and costs involved in obtaining a driver's license
A13 compare the procedures, costs, advantages, and disadvantages involved in buying a new versus a used vehicle
A14 explain the factors and costs involved in insuring a vehicle
B3 calculate gross pay and net pay for given situations
B4 estimate and calculate the unit prices of comparable items to determine the best buy
B5 solve problems involving the estimation and calculation of provincial and federal sales taxes
B6 estimate and calculate selling price, discounts, and taxes
B7 provide the correct change for an amount offered and minimize the number of coins/bills
B8 select amounts to offer for a given charge to minimize the number of coins/bills received in the change

B9 identify, calculate, and compare the interest costs involved in making purchases under various plans
B11 calculate simple and compound interest
B12 calculate the fixed and variable costs involved in owning and operating a vehicle
B13 compare the costs involved in buying versus leasing the same new vehicle
B14 compare the costs of owning or leasing and maintaining vehicle with the costs of other forms of transportation
B15 complete a project involving the purchase or lease of a new vehicle or the purchase of a used vehicle, including the cost of insurance
B18 estimate appropriate sums, differences, products, and quotients
B19 mentally calculate 1%, 10%, 15%, and 50% quantities that are compatible with these percentage
B20 estimate and calculate percentage of quantities as performing operations with decimals, fractions, and percent
C1 recognize patterns in tables where simple and compound interest has been calculated
C2 recognize and apply the patterns in the metric system
C3 recognize and apply the common fraction patterns found on an Imperial ruler
D1 demonstrate a working knowledge of the metric system and imperial system
D2 measure lengths accurately, using metric system and the imperial system
D3 estimate distances in metric units and in imperial units by applying personal referents
E4 create designs involving tiling patterns (e.g., Escher-type designs, wallpaper or fabric designs), using technology (e.g., dynamic geometry software, design or drawing software
E5 analyze the geometric aspects of logos and design
E6 create a personal logo, using the mathematics of symmetry, translations, reflections, rotations, or dilatations, with the aid of technology

F4 make decisions regarding the purchase of costly items by identifying and ranking criteria for the comparison of possible choices
F5 make decisions regarding the payment options for purchases
F6 identify various incentives to make purchases
F7 make personal decisions regarding the best form of transportation
G1 express probabilities of simple events as the number of favourable outcomes divided by the total number of outcomes
G2 express probabilities as fractions, decimals, and percentages and interpret probabilities expressed in each of these forms