

Mathematics Essentials 10

Outcomes

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Mathematics Essentials 10 Outcomes

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| 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 |

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| 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