ALBERTA MATH 30-3 · UNIT 4 · 5 QUESTIONS

Formulas and Relations — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **For a roof rafter, $\cos(40°) = \frac{10}{L}$, where L is the rafter length in metres and $\cos(40°) = 0.766$. The rafter length, to the nearest tenth, is**

- **A** 7.7 m
- **B** 10.8 m
- **C** 9.2 m
- **D** 13.1 m

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2 **Temperature is converted using $F = \frac{9}{5}C + 32$. An oven set to 180° C is equal to**

- A 100° F
- B 324° F
- C 356° F
- D 212° F

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3 **The graph shows the cost of a phone data plan for different amounts of data. The cost of each additional gigabyte is**

- A $30
- B $8
- C $38
- D $16

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4 **Two straight parallel railway tracks running away into the distance through green countryside. The area of a trapezoid is A = a + b 2 × h . A yard has area 60 m² and parallel sides of 7 m and 13 m . The distance between the parallel sides is**



A 6 m

B 3 m

C 12 m

D 120 m

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5 **A one day car rental costs C = 75 + 0.40k , where C is the cost in dollars and k is the kilometres driven. The number 75 in this relation represents**

- **A** The cost of $75 for each kilometre driven.
- **B** The total cost, which is always $75 .
- **C** The fee of $75 added for each extra day.
- **D** The base fee of $75 for the one day rental.

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ANSWER KEY

1. D
2. C
3. B
4. A
5. D

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