ENGLAND GCSE MATHS AQA HIGHER · UNIT 8 · 10 QUESTIONS

Proportion, Rates of Change, Growth and Decay — 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 so it can be fixed.

1 **A passenger aeroplane travels 900 km in 1.5 hours. Its average speed is**

- A 1200
- B 500
- C 700
- D 600

Understand It with Pulse | Flag a mistake

2 **A rocket travels 3600 km in 4 hours. Its average speed is**

- A 800
- B 900
- C 1800
- D 1000

Understand It with Pulse | Flag a mistake

3 **A bicycle travels 75 km in 5 hours. Its average speed is**

- A 15
- B 30
- C 20
- D 10

Understand It with Pulse | Flag a mistake

4 **y is inversely proportional to x and y = 8 when x = 6. Find y when x = 2.**

- A 2
- B 24
- C 32
- D 96

Understand It with Pulse | Flag a mistake

5 **Water flows into a swimming pool at 20 litres per minute. How long does it take to fill 800 litres?**

- A 40
- B 80
- C 30
- D 50

Understand It with Pulse | Flag a mistake

6 **On a distance-time graph, a car travels 90 km in 4 hours at a steady speed. The speed of the car, in km/h, is**

- A 44
- B 360
- C 86
- D 22

Understand It with Pulse | Flag a mistake

7 **y is inversely proportional to x^2 and y = 36 when x = 1. Find y when x = 4.**

- A 144
- B 38
- C 2
- D 9

Understand It with Pulse | Flag a mistake

8 **A force of 480 N acts on an area of 6 m². The pressure, in $\frac{N}{m^2}$, is**

A 80

B 2880

C 85

D 240

Understand It with Pulse | Flag a mistake

9 **A red race car travels 150 km in 1.5 hours. Its average speed, in km/h, is**

A 50

B 100

C 110

D 225

Understand It with Pulse | Flag a mistake

10 **Money of £1000 is invested at 4% compound interest per year. How much is it worth after 2 years?**

A £1081.60

B £1080

C £1131.60

D £1040

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	D	**5.**	A	**9.**	B
2.	B	**6.**	D	**10.**	A
3.	A	**7.**	C		
4.	B	**8.**	A		

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