ENGLAND GCSE MATHS EDEXCEL 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 **Water flows into a swimming pool at 20 litres per minute. How long does it take to fill 1200 litres?**

- A 50
- B 70
- C 120
- D 60

Understand It with Pulse | Flag a mistake

2 **A rocket travels 2700 km in 3 hours. Its average speed is**

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

Understand It with Pulse | Flag a mistake

3 **y is directly proportional to x and y = 4 when x = 2. Find y when x = 5.**

- A 7
- B 20
- C 12
- D 10

Understand It with Pulse | Flag a mistake

4 **y is inversely proportional to x and y = 12 when x = 4. Find y when x = 2.**

A 6

B 96

C 24

D 36

Understand It with Pulse | Flag a mistake

5 **A red race car worth £20000 loses 20% of its value each year. How much is it worth after one year?**

A £4000

B £19600

C £17000

D £16000

Understand It with Pulse | Flag a mistake

6 **y is inversely proportional to x^2 and y = 36 when x = 1. Find y when x = 6.**

A 37

B 216

C 6

D 1

Understand It with Pulse | Flag a mistake

7 **A passenger aeroplane travels 1200 km in 2 hours. Its average speed is**

A 700

B 600

C 500

D 1200

Understand It with Pulse | Flag a mistake

8 **A block has mass 480 g and volume 80 cm³. Its density, in g/cm³, is**

A 8

B 38400

C 240

D 6

Understand It with Pulse | Flag a mistake

9 **A bicycle travels 30 km in 2 hours. Its average speed is**

A 20

B 30

C 10

D 15

Understand It with Pulse | Flag a mistake

10 **A force of 480 N acts on an area of 4 m^2. The pressure, in $\frac{N}{m^2}$, is**

A 125

B 240

C 1920

D 120

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.