ENGLAND GCSE MATHS OCR FOUNDATION · 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 red race car worth £12000 loses 15% of its value each year. How much is it worth after one year?**

- **A** £1800
- **B** £11820
- **C** £10200
- **D** £11200

Understand It with Pulse | Flag a mistake

2 **Water flows into a swimming pool at 15 litres per minute. How long does it take to fill 450 litres?**

- A 60
- B 20
- C 40
- D 30

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3 **y is inversely proportional to x and y = 24 when x = 2. Find y when x = 8.**

- A 96
- B 30
- C 384
- D 6

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4 **A passenger aeroplane travels 1600 km in 2 hours. Its average speed is**

- A 900
- B 700
- C 800
- D 1600

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5 **y is directly proportional to x and y = 6 when x = 2. Find y when x = 9.**

- A 12
- B 54
- C 27
- D 30

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6 **A force of 480 N acts on an area of 12 m². The pressure, in $\frac{N}{m^2}$, is**

- A 240
- B 45
- C 5760
- D 40

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7 **A rocket travels 2400 km in 4 hours. Its average speed is**

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

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8 **A population of 500 grows by 3% each year. After 3 years the population is about**

- A 1000
- B 545
- C 596
- D 546

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9 **A passenger train travels 180 km in 1.5 hours. Its average speed, in km/h, is**

- A 270
- B 120
- C 60
- D 130

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10 **A bicycle travels 60 km in 3 hours. Its average speed is**

- A 20
- B 40
- C 15
- D 25

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ANSWER KEY

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

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