

Cambridge IGCSE
MATHEMATICS

0580 - P2

2020 - 2025

QUESTIONS + ANSWERS

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1 - (0580/21_Summer_2020_Q2) - *Number Facts*

Find the highest **odd** number that is a factor of 60 and a factor of 90.

..... [1]

2 - (0580/21_Summer_2020_Q7) - *Number Facts*

$$234 = 2 \times 3^2 \times 13 \quad 1872 = 2^4 \times 3^2 \times 13 \quad 234 \times 1872 = 438\,048$$

Use this information to write 438 048 as a product of its prime factors.

..... [1]

3 - (0580/21_Summer_2020_Q8) - *Number Facts*

Without using a calculator, work out $\left(2\frac{1}{3} - \frac{7}{8}\right) \times \frac{6}{25}$.

You must show all your working and give your answer as a fraction in its simplest form.

..... [4]

4 - (0580/21_Summer_2020_Q18) - *Upper And Lower Bound*

$$P = 2(w + h)$$

$w = 12$ correct to the nearest whole number.

$h = 4$ correct to the nearest whole number.

Work out the upper bound for the value of P .

..... [2]

5 - (0580/22_Summer_2020_Q2) - *Number Facts*

At noon the temperature in Maseru was 21°C .

At midnight the temperature had fallen by 26°C .

Work out the temperature at midnight.

..... $^{\circ}\text{C}$ [1]

6 - (0580/22_Summer_2020_Q4) - *Rational And Irrational Numbers*

Write down

(a) a square number greater than 10,

..... [1]

(b) an irrational number.

..... [1]

7 - (0580/22_Summer_2020_Q10) - *Number Facts*

Simplify.

$$\frac{p}{2q} \times \frac{4pq}{t}$$

..... [2]

8 - (0580/22_Summer_2020_Q11) - *Number Facts*

Without using a calculator, work out $1\frac{3}{4} - \frac{11}{12}$.

You must show all your working and give your answer as a fraction in its simplest form.

..... [3]

9 - (0580/22_Summer_2020_Q12) - *Percentages*

Roberto buys a toy for \$5.00 .

He then sells it for \$4.60 .

Calculate his percentage loss.

..... % [2]

10 - (0580/22_Summer_2020_Q15) - *Upper And Lower Bound*

Ella's height is 175 cm, correct to the nearest 5 cm.

Write down the upper bound of Ella's height.

..... cm [1]

ANSWERS

1 - (0580/21_Summer_2020_Q2) - Number Facts

	15	1	
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2 - (0580/21_Summer_2020_Q7) - Number Facts

	$2^5 \times 3^4 \times 13^2$	1	
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3 - (0580/21_Summer_2020_Q8) - Number Facts

	$\frac{56}{24} - \frac{21}{24}$	M2	M2 for correct method for common denominator or B1 for $\frac{7}{3}$
	their $\frac{35}{24} \times \frac{6}{25}$	M1	
	$\frac{7}{20}$	A1	

4 - (0580/21_Summer_2020_Q18) - Upper And Lower Bound

	34	2	M1 for $12 + 0.5$ or $4 + 0.5$ or better seen
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5 - (0580/22_Summer_2020_Q2) - Number Facts

	-5	1	
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6 - (0580/22_Summer_2020_Q4) - Rational And Irrational Numbers

(a)	Any square number greater than 10	1	
(b)	Any irrational number	1	

7 - (0580/22_Summer_2020_Q10) - Number Facts

	$\frac{2p^2}{t}$	2	B1 for correct unsimplified answer
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