

**Edexcel Foundation, 1-Mark Question Practice.**

**1**

a	Change 783 cm into metres.	7.83 m
b	Change 5.2 kg into grams.	5200 g
c	Convert 3.2 km into metres	3200 m
d	Write 9200 mm in metres	9.2 m
e	Convert 8350 g into kilogrammes	8.35 kg

**2**

a	Work out $3 + 8 \times 10$	83
b	Calculate $2 \times 5 - 3 \times 3$	1
c	Work out $5 \times (3 + 7)$	50
d	Add brackets to make this true, $4 \times 7 - 3 + 5 = 21$	$4 \times (7 - 3) + 5 = 21$
e	Joe says $13 - 3 \times 5 = 50$ . This is wrong. What should the answer be?	-2

**3**

a	Solve $\frac{x}{4} = 3.5$	14
b	Solve $3x = 21$	7
c	Find the value of $x$ , $\frac{x}{2} - 7 = 5$	24
d	Solve $8x - 9 = 39$	6
e	Solve $x - 6 = \frac{x}{2} + 7$	26

**4**

a	Write $\frac{9}{100}$ as a decimal	0.09
b	Write 0.3 as a fraction	$\frac{3}{10}$
c	Write 37% as a decimal	0.37
d	Write 41% as a fraction	$\frac{41}{100}$
e	Write 0.73 as a fraction	$\frac{73}{100}$

## 5

a	<p>Here are the first four terms of a number sequence.</p> <p>1                      4                      13                      40</p> <p>The rule to continue this sequence is multiply the previous term by 3 and then add 1</p> <p>Work out the 5th term of this sequence.</p>	121				
b	<p>Here are the first four terms of a number sequence.</p> <p>5                      7                      11                      19</p> <p>The rule to continue this sequence is multiply the previous term by 2 and then subtract 3</p> <p>Work out the 5th term of this sequence.</p>	35				
c	<p>Here are the first four terms of a number sequence.</p> <p>3                      2                      10                      24</p> <p>The rule to continue this sequence is add the two previous numbers then multiply by 2</p> <p>Work out the 5th term of this sequence.</p>	68				
d	<p>The table shows the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> terms of a sequence.</p> <table><tr><td></td><td>11</td><td>35</td><td>107</td></tr></table> <p>The rule is multiply the previous term by 3 then add 2.</p> <p>Work out the 1<sup>st</sup> term</p>		11	35	107	3
	11	35	107			
e	<p>Here are the first four terms in a sequence</p> <p>2                      7                      17                      37</p> <p>Write down the rule</p>	Multiply by 2 than add 3				

## 6

a	Write down a multiple of 8 that is between 50 and 60.	56
b	Write down the two multiples of 7 that are between 40 and 50.	42 and 49
c	Write down any two factors of 18.	Any two of 1, 2, 3, 6, 9, 18
d	List all the factors of 15	1, 3, 5, 15
e	Express 20 as a product of prime factors	2 x 2 x 5

**7**

a	Simplify $2p \times 7q$	14pq
b	Simplify $k \times k$	$k^2$
c	Simplify $\frac{4h+6h}{2}$	5h
d	Simplify $3r \times 5s \times 10t$	150rst
e	Simplify $3m \times 2m$	$6m^2$

**8**

a	Write 5472 correct to the nearest 1000	5000
b	Write 257 correct to the nearest 100	300
c	Write 7658 correct to the nearest 10	7660
d	Calculate $2 \times 1530$ . Write your answer to nearest 1000	(3060) 3000
e	Work out $3 \times 420$ Write your answer to the nearest 100	(1260) 1300

**9**

a	Simplify $x + 5x - 3x$	3x
b	Simplify $2y - 7y + 3y$	-2y
c	Simplify $3x + 5y - x + 4y$	$2x + 9y$
d	Simplify $4m + 5n - 7m - 9n$	$-3m - 4n$
e	Simplify $3p + 8p - q - 5p$	$6p - q$

**10**

a	Write the following numbers in order of size. Start with the smallest number. 0.6      0.04      0.39      0.172      0.4	0.04, 0.172, 0.39, 0.4, 0.6
b	Write the following numbers in order of size. Start with the smallest number. 0.3      0.03      0.303      0.33      3.3	0.03, 0.3, 0.303, 0.33, 3.3
c	Write the following numbers in order of size. Start with the smallest number. 0.1      3/10      27/100      0.25      0.8	0.1, 0.25, 27/100, 3/10, 0.8
d	Which is biggest 0.4 or 37/100?	0.4
e	Which is biggest 231/1000 or 0.2?	231/1000

**11**

a	Write down the value of the 2 in the number 825.7	20
b	Write down the value of the 9 in the number 79364	9000
c	Write down the value of the 6 in the number 5.632	6/10
d	Write down the value of the 5 in the number 1357234	50000
e	Write down the value of the 7 in the number 0.376	7/100

**12**

a	Write down a square number that is also an even number.	E.g. 4, 16, 36...			
b	Find the two square numbers that add to give 41	25 and 16			
c	When you multiply an odd number by an even number the result is: <table border="1" data-bbox="183 1232 810 1274"> <tr> <td>A. Odd</td> <td>B. Even</td> <td>C. Either</td> </tr> </table>	A. Odd	B. Even	C. Either	B. Even
A. Odd	B. Even	C. Either			
d	Write down the three square numbers between 40 and 90	49, 64, 81			
e	Which is biggest $2^5$ or $5^2$ ?	$2^5$ (32) or (25)			

**13**

a	Calculate 3 cubed	27
b	Work out the cube root of 64	4
c	Which is biggest 2 cubed or the cube root of 125?	$2^3$ (8) or (5)
d	Add $\sqrt[3]{1000}$ to $\sqrt{81}$	19
e	Work out $\sqrt[3]{27} \times \sqrt[3]{8}$	6

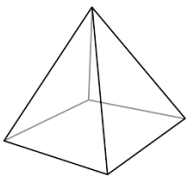
14

a	Find $\sqrt{1.96}$	1.4
b	Work out $\sqrt{57.76}$	7.6
c	Calculate $\sqrt{756.25}$	27.5
d	Work out $\sqrt{36} + \sqrt{2.25}$	7.5
e	Calculate $\sqrt{81} - \sqrt{5.76}$	6.6

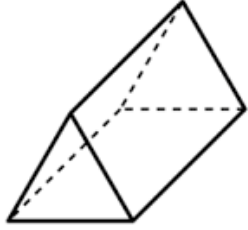
15

a	Work out $\frac{1}{5}$ of 120	24
b	Find $\frac{1}{7}$ of 140	20
c	Calculate $\frac{1}{3}$ of 105	35
d	Find $\frac{1}{9}$ of 108	12
e	Which is biggest $\frac{1}{4}$ of 164 or $\frac{1}{3}$ of 126	(41) or (42) so $\frac{1}{3}$ of 126 is biggest

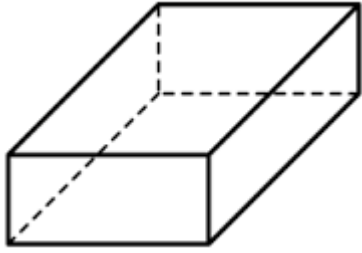
16

a	Name this shape 	(Square-based) Pyramid
b	How many <b>faces</b> does the shape (a) have?	5
c	How many <b>edges</b> does the shape (a) have?	8
d	How many <b>vertices</b> does the shape (a) have?	5
e	Check that <b>faces + vertices – edges = 2</b> ( <b>F + V – E = 2</b> 'Euler's Formula')	5 + 5 – 8 = 2 ✓

17

a	Name this shape 	Triangular Prism
b	How many <b>faces</b> does the shape (a) have?	5
c	How many <b>edges</b> does the shape (a) have?	9
d	How many <b>vertices</b> does the shape (a) have?	6
e	Check $F + V - E = 2$	$5 + 6 - 9 = 2 \checkmark$

18

a	Name this shape 	Cuboid
b	How many <b>faces</b> does the shape (a) have?	6
c	How many <b>edges</b> does the shape (a) have?	12
d	How many <b>vertices</b> does the shape (a) have?	8
e	Check that <b>faces + vertices – edges = 2</b> ( $F + V - E = 2$ 'Euler's Formula')	$6 + 8 - 12 = 2 \checkmark$

19

a	Tim is $t$ years old. His sister Sarah is 3 years older. Write an expression for Sarah's age.	$t+3$
b	Harriet is $h$ years old. Her brother Bob is 5 years younger. Write an expression for Bob's age	$h-5$
c	Connie is $c$ years old. Her brother Will is twice as old. Write an expression for Will's age.	$2c$
d	Paul is $p$ year's old. Lucy is 2 years older than Paul. Alex is twice as old as Lucy. Write an expression for Alex's age	$2(p + 2)$ or $2p + 4$
e	Max is $m$ year's old. Alice is 3 years younger than Max. Jean is three times as old as Alice. Write an expression for Jean's age.	$3(m - 3)$ or $3m - 9$

**20**

a	Work out the value of $10^4$	10000
b	Calculate $3^4$	81
c	Find $5^3$	125
d	Which is biggest $3^2$ or $2^3$ ?	(9) or (8) so $3^2$
e	Which is biggest $2^4$ or $4^2$ ?	(16) or (16) so the same!

**21**

a	Write 8.37562 correct to 3 decimal places.	8.376
b	Write 6.0423 correct to 3 decimal places.	6.042
c	Round 10.635 to 2 decimal places.	10.64
d	Round 17.3446 to 2 decimal places	17.34
e	Round 5.397 to 2 decimal places	5.40

**22**

a	Write 67.89 correct to one significant figure	70
b	Write 38.27 correct to 3 significant figures	38.3
c	Write 2.749 correct to 1 significant figure.	2.7
d	Write 0.00568 correct to 2 significant figures	0.0057
e	Write 592465 correct to 2 significant figures	590000

**23**

a	How many $\text{cm}^3$ in $1 \text{ m}^3$ ?	1 000 000
b	How many $\text{mm}^3$ in $1 \text{ cm}^3$ ?	1000
c	How many $\text{mm}^3$ in $2 \text{ m}^3$ ?	2 000 000 000
d	How many $\text{cm}^2$ in $3 \text{ m}^2$ ?	30 000
e	How many $\text{m}^2$ in a $\text{km}^2$	1 000 000

24

a	Which of these fractions is <b>not</b> equivalent to $\frac{1}{3}$ ? <table><tr><td><math>\frac{11}{33}</math></td><td><math>\frac{15}{45}</math></td><td><math>\frac{3}{30}</math></td><td><math>\frac{9}{27}</math></td></tr></table>	$\frac{11}{33}$	$\frac{15}{45}$	$\frac{3}{30}$	$\frac{9}{27}$	$\frac{3}{30}$
$\frac{11}{33}$	$\frac{15}{45}$	$\frac{3}{30}$	$\frac{9}{27}$			
b	Which of these fractions is <b>not</b> equivalent to $\frac{1}{5}$ ? <table><tr><td><math>\frac{7}{35}</math></td><td><math>\frac{9}{45}</math></td><td><math>\frac{20}{100}</math></td><td><math>\frac{15}{55}</math></td></tr></table>	$\frac{7}{35}$	$\frac{9}{45}$	$\frac{20}{100}$	$\frac{15}{55}$	$\frac{15}{55}$
$\frac{7}{35}$	$\frac{9}{45}$	$\frac{20}{100}$	$\frac{15}{55}$			
c	Which <b>two</b> of these fractions <b>are</b> equivalent to $\frac{1}{4}$ ? <table><tr><td><math>\frac{14}{44}</math></td><td><math>\frac{8}{32}</math></td><td><math>\frac{17}{68}</math></td><td><math>\frac{4}{14}</math></td></tr></table>	$\frac{14}{44}$	$\frac{8}{32}$	$\frac{17}{68}$	$\frac{4}{14}$	$\frac{8}{32}$ and $\frac{17}{68}$
$\frac{14}{44}$	$\frac{8}{32}$	$\frac{17}{68}$	$\frac{4}{14}$			
d	Which fraction is biggest? <table><tr><td><math>\frac{3}{5}</math></td><td><math>\frac{13}{20}</math></td></tr></table>	$\frac{3}{5}$	$\frac{13}{20}$	$\frac{13}{20}$		
$\frac{3}{5}$	$\frac{13}{20}$					
e	Which fraction is biggest? <table><tr><td><math>\frac{5}{8}</math></td><td><math>\frac{13}{24}</math></td></tr></table>	$\frac{5}{8}$	$\frac{13}{24}$	$\frac{5}{8}$		
$\frac{5}{8}$	$\frac{13}{24}$					

25

a	Here are 4-digits <table><tr><td>3</td><td>8</td><td>5</td><td>2</td></tr></table> Use these digits to write down the largest possible 4-digit number.	3	8	5	2	8532
3	8	5	2			
b	Use 3 of the digits in (a) to write down the smallest possible 3-digit number.	235				
c	Use 3 of the digits in (a) to write down the smallest possible 3-digit even number.	238				
d	Use 3 of the digits in (a) to write down the largest possible 3-digit number that rounds to 400.	385				
e	Use 3 of the digits in (a) to write down any 3-digit number that divides by 3.	258 or 285 or 528 or 582 or 828 or 852 (8+5+2 = 15 which divides by 3 so all 3-digit numbers made from them divide by 3)				



**26**

a	Write 240 minutes in hours	4 hrs
b	Write 140 minutes in hours and minutes.	2hrs 20 mins
c	Write 3 $\frac{1}{2}$ hours in minutes.	210 mins
d	Write 3.25 hours in hours and minutes.	3 hrs 15 mins
e	Write 2.75 hours in hours and minutes	2 hrs 45 mins

**27**

a	Write down the number that is exactly half way between 5 and 11	8
b	Write down the number that is exactly half way between 23 and 41	32
c	Write down the number that is exactly half way between 17 and 22	19.5
d	Write down the number that is exactly half way between 52 and 63	57.5
e	Write down the number that is exactly half way between 7.5 and 19.5	13.5