Edexcel Foundation, 1-Mark Question Practice.

1

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

2

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

3

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

4

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

5

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

6

a	Write down a multiple of 8 that is between 50 and 60.	
b	Write down the two multiples of 7 that are between 40 and 50.	
c	Write down any two factors of 18.	
d	List all the factors of 15	
e	Express 20 as a product of prime factors	

7

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

8

a	Write 5472 correct to the nearest 1000	
b	Write 257 correct to the nearest 100	
c	Write 7658 correct to the nearest 10	
d	Calculate 2 x 1530. Write your answer to nearest 1000	
e	Work out 3 x 420 Write your answer to the nearest 100	

9

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

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	
b	Write the following numbers in order of size. Start with the smallest number. 0.3 0.03 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	
d	Which is biggest 0.4 or 37/100?	
e	Which is biggest 231/1000 or 0.2?	

11

a	Write down the value of the 2 in the number 825.7	
b	Write down the value of the 9 in the number 79364	
c	Write down the value of the 6 in the number 5.632	
d	Write down the value of the 5 in the number 1357234	
e	Write down the value of the 7 in the number 0.376	

12

a	Write down a square number that is also an even number.	
b	Find the two square numbers that add to give 41	
c	When you multiply an odd number by an even number the result is: A. Odd | B. Even | C. Either	
d	Write down the three square numbers between 40 and 90	
e	Which is biggest 2^5 or 5^2?	

13

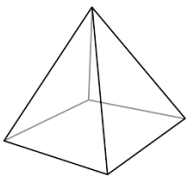|		
a	Calculate 3 cubed	
b	Work out the cube root of 64	
c	Which is biggest 2 cubed or the cube root of 125?	
d	Add $\sqrt[3]{1000}$ to $\sqrt{81}$	
e	Work out $\sqrt[3]{27} \times \sqrt[3]{8}$	

14

a	Find $\sqrt{1.96}$	
b	Work out $\sqrt{57.76}$	
c	Calculate $\sqrt{756.25}$	
d	Work out $\sqrt{36} + \sqrt{2.25}$	
e	Calculate $\sqrt{81} - \sqrt{5.76}$	
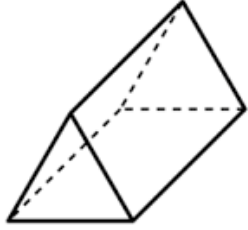
15

a	Work out $\frac{1}{5}$ of 120	
b	Find $\frac{1}{7}$ of 140	
c	Calculate $\frac{1}{3}$ of 105	
d	Find $\frac{1}{9}$ of 108	
e	Which is biggest $\frac{1}{4}$ of 164 or $\frac{1}{3}$ of 126	
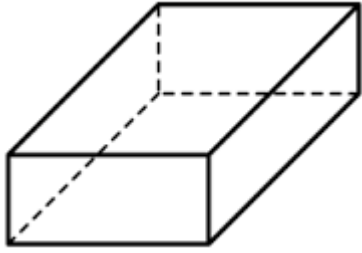
16

a	Name this shape	
b	How many **faces** does the shape (a) have?	
c	How many **edges** does the shape (a) have?	
d	How many **vertices** does the shape (a) have?	
e	Check that **faces** + **vertices** – **edges** = 2 (**F + V – E = 2** 'Euler's Formula)	

17

a	Name this shape	
b	How many **faces** does the shape (a) have?	
c	How many **edges** does the shape (a) have?	
d	How many **vertices** does the shape (a) have?	
e	Check **F + V − E = 2**	

18

a	Name this shape	
b	How many **faces** does the shape (a) have?	
c	How many **edges** does the shape (a) have?	
d	How many **vertices** does the shape (a) have?	
e	Check that **faces** + **vertices** − **edges** = 2 (**F + V − E = 2** 'Euler's Formula)	

19

a	Tim is *t* years old. His sister Sarah is 3 years older. Write an expression for Sarah's age.	
b	Harriet is *h* years old. Her brother Bob is 5 years younger. Write an expression for Bob's age	
c	Connie is *c* years old. Her brother Will is twice as old. Write an expression for Will's age.	
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	
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.	

20

a	Work out the value of 10^4	
b	Calculate 3^4	
c	Find 5^3	
d	Which is biggest 3^2 or 2^3?	
e	Which is biggest 2^4 or 4^2?	

21

a	Write 8.37562 correct to 3 decimal places.	
b	Write 6.0423 correct to 3 decimal places.	
c	Round 10.635 to 2 decimal places.	
d	Round 17.3446 to 2 decimal places	
e	Round 5.397 to 2 decimal places	

22

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

23

a	How many cm^3 in 1 m^3?	
b	How many mm^3 in 1cm^3?	
c	How many mm^3 in 2m^3?	
d	How many cm^2 in 3 m^2?	
e	How many m^2 in a km^2	

24

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

25

a	Here are 4-digits 3 8 5 2 Use these digits to write down the largest possible 4-digit number.	
b	Use 3 of the digits in (a) to write down the smallest possible 3-digit number.	
c	Use 3 of the digits in (a) to write down the smallest possible 3-digit even number.	
d	Use 3 of the digits in (a) to write down the largest possible 3-digit number that rounds to 400.	
e	Use 3 of the digits in (a) to write down any 3-digit number that divides by 3.	

26

a	Write 240 minutes in hours	
b	Write 140 minutes in hours and minutes.	
c	Write 3 ½ hours in minutes.	
d	Write 3.25 hours in hours and minutes.	
e	Write 2.75 hours in hours and minutes	

27

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