

## EASE 3 Preparation Grade 8

1 Evaluate  $3(16 - 3^2) + 19$ .

- A) 10
- B) 20
- C) 30
- D) 40

2  $x - 6^2 = 64$

What is the value of x?

- A) 28
- B) 70
- C) 76
- D) 100

3 What is the square root of 529?

- A) 13
- B) 17
- C) 23
- D) 27

4  $\sqrt{441} + \sqrt[3]{64} - \sqrt{144} =$

- A) 6
- B) 13
- C) 17
- D) 21

⑤  $155 \times 10^{-2} = ?$

- A) 15500
- B) 1550
- C) 1.55
- D) 0.155

⑥ Simplify expression and write it as a single power.

$$x^5 \div x^3.$$

- A)  $x^2$
- B)  $x^3$
- C)  $x^4$
- D)  $x^5$

⑦ 4,6,8,10,...

Find the nth term for this sequence.

- A)  $n+1$
- B)  $n+2$
- C)  $2n+1$
- D)  $2n+2$

⑧ What is the 50th term of the sequence?

- A) 247
- B) 253
- C) 243

9) Which one of these sequences is a non-linear sequence?

- A) 25, 17, 9, 1, -7
- B) 5, 12, 19, 26, 33
- C) 8, 9, 11, 14, 18
- D) -3, -1, 1, 3, 5

10) What is the inverse function of  $y = 10x + 2$ ?

A)  $y = \frac{x-2}{10}$

B)  $y = x - \frac{2}{10}$

C)  $y = \frac{x}{10} - 2$

D)  $y = \frac{x-10}{2}$

11) A pack of 6 pens costs \$5.79. A pack of 20 of the same pens costs \$19.70. Which pack is better value for money?

- A) A pack of 6 pens
- B) A pack of 20 pens
- C) Both of them same
- D) Not enough information has been given to solve this question.

Write 3.232 m to the nearest centimetre.

A) 3232 cm

B) 3233 cm

C) 323 cm

D) 324 cm

(12) Round 41.1312 to the 3 significant figures.

- A) 41.131
- B) 41.13
- C) 41.1
- D) 41

(13) A bag of oranges has a mass of 1.5 kg. There are 6 oranges in the bag.

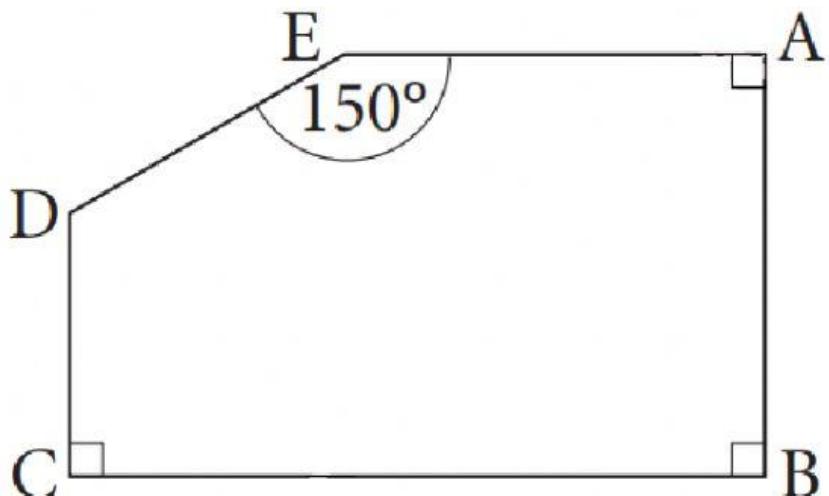
The mass of 1 orange is about \_\_\_\_ g.

- A) 25
- B) 250
- C) 2500
- D) 25000

(14)  $32 \times 0.02 = ?$

- A) 0.64
- B) 6.4
- C) 64
- D) 640

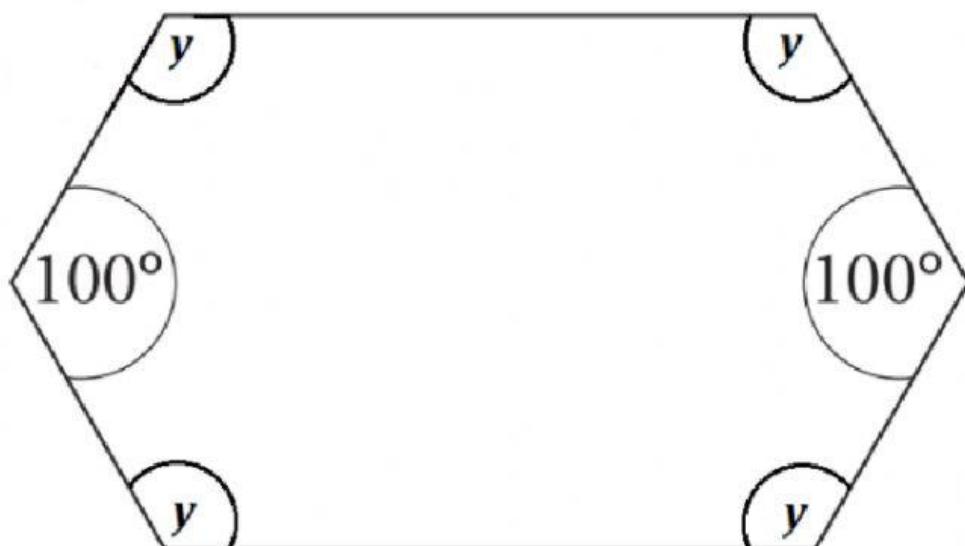
15 Given pentagon with interior angle A, B, C, D, and E



Which angles add up to 360?

- A)  $\angle A, \angle B, \text{ and } \angle C$
- B)  $\angle A, \angle B, \angle C, \text{ and } \angle D$
- C)  $\angle C, \angle D, \text{ and } \angle E$
- D)  $\angle A, \angle B, \text{ and } \angle D$

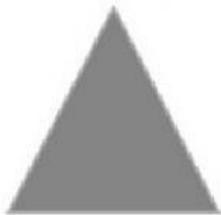
16 Two of the angles of this polygon are 100°. All the other angles are equal.



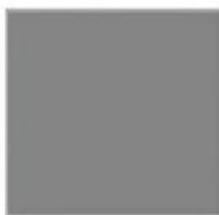
Calculate the size of the y-angle

- A) 130
- B) 90
- C) 50
- D) 25

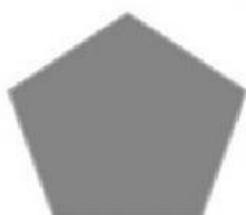
17) Which of the following polygon has the sum of 360 degrees in its internal angle?



Triangle



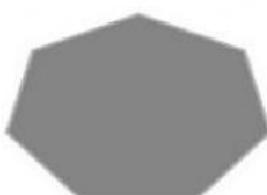
Rectangle



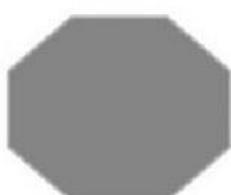
Pentagon



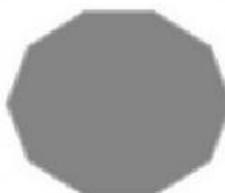
Hexagon



Heptagon



Octagon



Decagon

- A) heptagon
- B) rectangle
- C) hexagon
- D) decagon

(18) Work out the number of sides of a regular polygon, if the interior angle is  $170^\circ$ !

- A) 18
- B) 24
- C) 32
- D) 36

(19) An interior angle of a regular polygon has  $108^\circ$ , how many sides does the polygon have?

- A) 3
- B) 4
- C) 5
- D) 6

(20) What data describe this case?

Tanesha would have to get this information from weather records. She could use the internet to look for weather records for Europe. She may also be able to get this information from travel brochures.

- A) Basic Data
- B) Primary Data
- C) Secondary Data
- D) Tertiary Data

21 Secondary data is data that you get from ...

- A) carrying out experiment by
- B) doing a survey
- C) surfing the internet
- D) asking people questions

22 Which of the following event has to use the primary data?

- A) Hasan is investigating whether his family members think that labuan bajo is a good destination for holiday
- B) Maza is investigating the number of flights in Indonesian aerial space recorded in the Air Traffic Control
- C) Quincy is investigating the favorite colour of Indonesian woman
- D) Sabrina is investigating how many people come to supermarket for a month

23 Linda has a four-sided dice. When she rolls the dice she gets one of the four numbers 1,2,3 or 4. Linda rolls the dice 25 times. Here are the results:

3	1	4	2	3	4	2	1	4	2	3	2	2
4	2	4	1	4	2	3	3	2	1	4	1	

Which number was rolled most often?

- A) 1
- B) 2
- C) 3
- D) 4

24

Tanesha is investigating the age of the workers in a factory. She uses this data-collection sheet. She asks 100 workers to say which age group they are in.

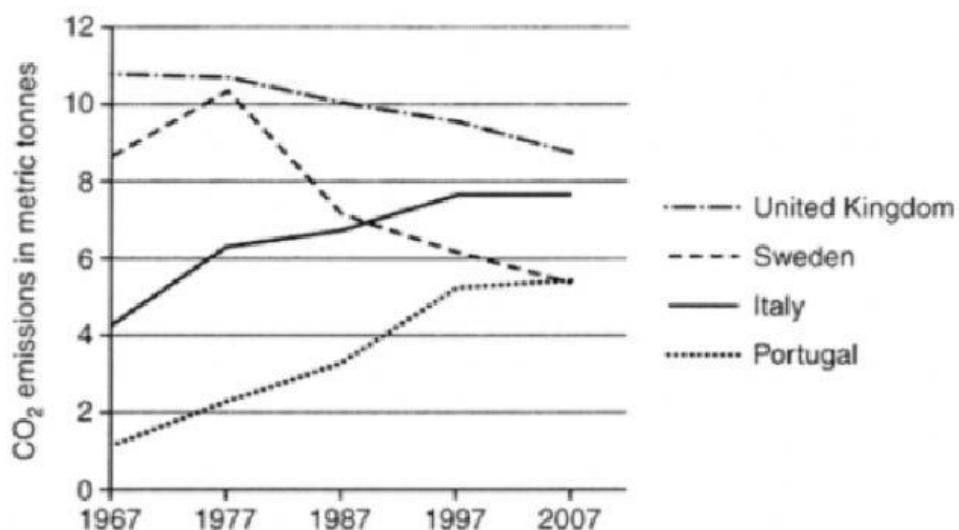
Age (years)	Tally	Frequency
20–30		
30–40		
40–50		
<b>Total</b>		

Which one the reasons why her data-collection sheet is not suitable?

- A) It doesn't have tally column
- B) The age groups overlap for aged 30 and 40
- C) It doesn't have workers name
- D) The range is too large

25

Average carbon dioxide (CO<sub>2</sub>) emissions per person, 1967–2007



The graph above shows average carbon dioxide emissions per person in four European countries. Which country has the most rapid incline of carbon emissions during the 80's decade?