MANITOBA ESSENTIAL MATHEMATICS 20S · UNIT F · 25 QUESTIONS

Relations and Patterns — 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 to let Brett know so he can fix it.

1 **A pattern of tiles has 6 tiles in figure 1 and 2 more tiles in each later figure. Figure 6 has**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A pattern starts at 8 and adds 4 each time. The 5th term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The pattern 8, 16, 24, 32 continues. The next term is**

- A 36
- B 40
- C 42
- D 48

Understand It with Pulse | Flag a mistake

4 **A pattern adds 5 each time, starting at 7. The term after 17 is**

- A 22
- B 21
- C 23
- D 27

Understand It with Pulse | Flag a mistake

5 **A pattern starts at 2 and multiplies by 2 each time. The term after 3 steps from the start is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A student saves 15 dollars in week 1 and saves 7 dollars more each week than the week before. The amount saved in week 5 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A table follows the rule output equals 5 times x plus 3. When x is 6, the output is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **One table seats 4 people and each extra table adds 2 seats. 7 tables seat**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A pattern doubles each time, starting at 3. The term after 12 is**

A 18

B 24

C 20

D 36

Understand It with Pulse | Flag a mistake

10 **A pattern of tiles has 3 tiles in figure 1, 5 tiles in figure 2, and 7 tiles in figure 3. Figure 4 has**

- A 9 tiles
- B 8 tiles
- C 10 tiles
- D 11 tiles

Understand It with Pulse | Flag a mistake

11 **A repeating pattern is circle, square, circle, square. The 10th shape is a**

- A circle
- B square
- C triangle
- D star

Understand It with Pulse | Flag a mistake

12 A sequence decreases by 4 each time, starting at 30. The third term is

- A 20
- B 24
- C 26
- D 22

Understand It with Pulse | Flag a mistake

13 A sequence increases by 9 each time, starting at 5. The third term is

- A 14
- B 21
- C 23
- D 27

Understand It with Pulse | Flag a mistake

14 **In a table, when x is 2 the output is 7, when x is 3 the output is 10, and when x is 4 the output is 13. The output when x is 5 is**

- A 15
- B 17
- C 16
- D 19

Understand It with Pulse | Flag a mistake

15 **A pattern of tiles has 3 tiles in figure 1 and 4 more tiles in each later figure. Figure 7 has**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A pattern starts at 5 and adds 7 each time. The 7th term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The pattern 3, 7, 11, 15 continues. The next term is**

A 18

B 20

C 19

D 23

Understand It with Pulse | Flag a mistake

18 **A pattern adds 6 each time, starting at 4. The term after 22 is**

A 26

B 30

C 24

D 28

Understand It with Pulse | Flag a mistake

19 **A pattern starts at 3 and multiplies by 3 each time. The term after 4 steps from the start is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A student saves 20 dollars in week 1 and saves 8 dollars more each week than the week before. The amount saved in week 6 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A table follows the rule output equals 4 times x plus 5. When x is 5, the output is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **One table seats 5 people and each extra table adds 4 seats. 4 tables seat**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 A pattern of tiles has 4 tiles in figure 1 and 2 more tiles in each later figure. Figure 4 has

ANSWER _____

Understand It with Pulse | Flag a mistake

24 A pattern starts at 9 and adds 4 each time. The 6th term is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 The pattern 5, 10, 15, 20 continues. The next term is

- A 24
- B 30
- C 21
- D 25

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	16	**10.**	A	**19.**	243
2.	24	**11.**	B	**20.**	60
3.	B	**12.**	D	**21.**	25
4.	A	**13.**	C	**22.**	17
5.	16	**14.**	C	**23.**	10
6.	43	**15.**	27	**24.**	29
7.	33	**16.**	47	**25.**	D
8.	16	**17.**	C		
9.	B	**18.**	D		

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