3D Objects and Scale Diagrams — Practice Test

Yukon Workplace Mathematics 11 (MWPM-11) • 25 questions

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 **The volume of a cube with side length 4 cm is**

- **A** 16 cm³
- **B** 24 cm³
- **C** 48 cm³
- **D** 64 cm³

Understand It with Pulse | Flag a mistake

2 The surface area of a cube with side length 3 cm is

- A 18 cm^2
- B 27 cm^2
- C 36 cm^2
- D 54 cm^2

Understand It with Pulse | Flag a mistake

3 A rectangular prism is 5 cm long, 4 cm wide and 3 cm high. Its volume is

- A 47 cm^3
- B 60 cm^3
- C 94 cm^3
- D 120 cm^3

Understand It with Pulse | Flag a mistake

4 **A rectangular prism is 5 cm long, 4 cm wide and 3 cm high. Its surface area is**

- **A** 47 cm^2
- **B** 60 cm^2
- **C** 94 cm^2
- **D** 120 cm^2

Understand It with Pulse | Flag a mistake

5 **The volume of a cylinder with radius 2 cm and height 5 cm is**

- **A** 10π cm^3
- **B** 20π cm^3
- **C** 40π cm^3
- **D** 100π cm^3

Understand It with Pulse | Flag a mistake

6 The surface area of a cylinder with radius 3 cm and height 4 cm is

- A 24π cm²
- B 36π cm²
- C 42π cm²
- D 48π cm²

Understand It with Pulse | Flag a mistake

7 The volume of a sphere with radius 3 cm is

- A 12π cm³
- B 27π cm³
- C 36π cm³
- D 108π cm³

Understand It with Pulse | Flag a mistake

8 **The volume of a cone with radius 3 cm and height 4 cm is**

- A 12π cm³
- B 16π cm³
- C 36π cm³
- D 48π cm³

Understand It with Pulse | Flag a mistake

9 **A triangular prism has a triangular base of area 12 cm² and length 10 cm. Its volume is**

- A 60 cm³
- B 120 cm³
- C 240 cm³
- D 1200 cm³

Understand It with Pulse | Flag a mistake

10 How many faces does a rectangular prism have?

- A 4
- B 5
- C 6
- D 8

Understand It with Pulse | Flag a mistake

11 How many edges does a cube have?

- A 6
- B 8
- C 12
- D 16

Understand It with Pulse | Flag a mistake

12 **A net of a cube must have how many squares?**

- A 4
- B 5
- C 6
- D 8

Understand It with Pulse | Flag a mistake

13 **Which net folds to make a cube?**

- A Six squares in a cross shape
- B Five squares in a row
- C Seven squares in a cross shape
- D Four squares and two triangles

Understand It with Pulse | Flag a mistake

14 **A net made of two circles and one rectangle folds to make a**

A cylinder

B cone

C sphere

D cube

Understand It with Pulse | Flag a mistake

15 **A scale of 1:50000 means 1 cm on a map stands for**

A 50 m

B 500 m

C 5 km

D 50 km

Understand It with Pulse | Flag a mistake

16 **On a 1:50000 map, a road drawn 4 cm long is really**

- A 200 m
- B 2 km
- C 20 km
- D 200 km

Understand It with Pulse | Flag a mistake

17 **A model built at a scale of 1:24 of a 12 m long truck is**

- A 0.25 m long
- B 0.5 m long
- C 2 m long
- D 24 m long

Understand It with Pulse | Flag a mistake

18 **A drawing is 8 cm long and the real object is 4 m long. The scale is**

- A 1:5
- B 1:20
- C 1:50
- D 1:80

Understand It with Pulse | Flag a mistake

19 **If a length is enlarged by a scale factor of 3, a 5 cm length becomes**

- A 8 cm
- B 15 cm
- C 30 cm
- D 45 cm

Understand It with Pulse | Flag a mistake

20 If a length is reduced by a scale factor of $\frac{1}{4}$, a 20 cm length becomes

- A 4 cm
- B 5 cm
- C 10 cm
- D 80 cm

Understand It with Pulse | Flag a mistake

21 The triangle has legs 6 cm and 8 cm. Its hypotenuse is

- A 10 cm
- B 12 cm
- C 14 cm
- D 48 cm

Understand It with Pulse | Flag a mistake

22 The triangle is enlarged by a scale factor of 2. The 5 cm side becomes

- A 7 cm
- B 10 cm
- C 12 cm
- D 25 cm

Understand It with Pulse | Flag a mistake

23 When a solid is enlarged by a scale factor of 2, its volume is multiplied by

- A 2
- B 4
- C 6
- D 8

Understand It with Pulse | Flag a mistake

24 **When a shape is enlarged by a scale factor of 3, its area is multiplied by**

- A 3
- B 6
- C 9
- D 27

Understand It with Pulse | Flag a mistake

25 **A scale drawing of a room uses 1 cm to 2 m. A wall drawn 6 cm long is really**

- A 3 m
- B 8 m
- C 12 m
- D 24 m

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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