ALBERTA MATH 20-2 · UNIT 3 · 10 QUESTIONS

Angles and Triangles — 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 **Triangle ABC is shown. Angle B measures 58°. The measure of angle C is**

- A 122°
- B 32°
- C 58°
- D 90°

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2 **A transversal cuts two parallel lines. The same-side interior angles measure (x + 38)° and (3x + 6)°. The value of x is**

- A 30
- B 34
- C 44
- D 24

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3 **The two non-adjacent interior angles of a triangle measure 29° and 88°. The measure of the exterior angle at the third vertex is**

- A 63°
- B 107°
- C 91°
- D 117°

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4 **Two triangles each have angles of 51° and 68°, and the side between those two angles measures 9 cm in both. The congruence condition is**

- A ASA
- B SAS
- C SSS
- D AAS

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5 **Two similar triangles have corresponding sides of 6 cm and 15 cm. A side of the smaller triangle measures 9 cm. The length of the corresponding side of the larger triangle, in centimetres, is ____. Record your answer to the nearest tenth.**

ANSWER _____

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6 **Triangle MNO is shown. MN = 6 cm, MO = 8 cm. The length of NO is**

A 14 cm

B 10 cm

C 12 cm

D 9 cm

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7 **A ray bisects an angle into two parts measuring (2x + 8)° and (4x - 10)°. The measure of the full angle is**

- A 26°
- B 44°
- C 62°
- D 52°

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8 **At two vertices of a triangle, the exterior angles measure 112° and 124°. The measure of the interior angle at the third vertex is**

- A 46°
- B 68°
- C 56°
- D 66°

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9 **Two same-side interior angles formed by a transversal cutting parallel lines are in the ratio 2 : 7. The measure of the smaller angle, in degrees, is ____. Record your answer as a whole number.**

ANSWER _____

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10 **In triangle ABC, point D lies on AB and point E lies on AC, with segment DE parallel to BC. If AD = 3 cm, AB = 12 cm, and DE = 5 cm, then the length of BC is**

A 10 cm

B 20 cm

C 15 cm

D 25 cm

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ANSWER KEY

1.	B	**5.**	22.5	**9.**	40
2.	B	**6.**	B	**10.**	B
3.	D	**7.**	D		
4.	A	**8.**	C		

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