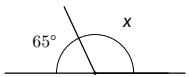
Angles on a Straight Line — Answers

1. Find angle *x*.

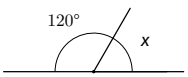


Solution

$x = 180° - 65°$

$x = 115°$

2. Find angle *x*.

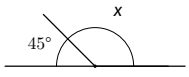


Solution

$x = 180° - 120°$

$x = 60°$

3. Find angle *x*.

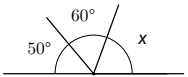


Solution

$x = 180° - 45°$

$x = 135°$

4. Find angle *x*.



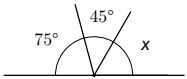
Solution

$x = 180° - 50° - 60°$

$x = 70°$

Angles on a Straight Line — Answers

5. Find angle x.

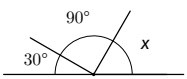


Solution

$x = 180° - 75° - 45°$

$x = 60°$

6. Find angle x.



Solution

$x = 180° - 30° - 90°$

$x = 60°$

7. What is the sum of all angles on a straight line?

Solution

Angles on a straight line sum to $180°$.

8. Two angles on a line are equal and both are $90°$. What is the third angle?

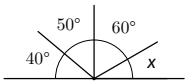
Solution

$90° + 90° = 180°$

Third angle $= 0°$

Straight Line & Around a Point — Answers

9. Find angle x.

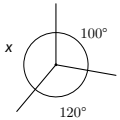


Solution

$x = 180° - 150°$

$x = 30°$

10. Find angle x.



Solution

$x = 360° - 220°$

$x = 140°$

11. Angles around a point are $85°$, $95°$, and x. Find x.

Solution

$x = 360° - 180°$

$x = 180°$

12. Angles around a point are $70°$, $110°$, and x. Find x.

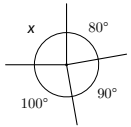
Solution

$x = 360° - 180°$

$x = 180°$

Angles Around a Point — Answers

13. Find angle x.



Solution

$x = 360° - 270°$

$x = 90°$

14. Angles around a point are $60°$, $60°$, $60°$, and x. Find x.

Solution

$x = 360° - 180°$

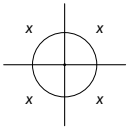
$x = 180°$

15. What is the sum of all angles around a point?

Solution

Angles around a point sum to $360°$.

16. Four equal angles around a point. Find each angle.



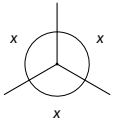
Solution

Each $= 360° \div 4$

$= 90°$

Around a Point & Vertically Opposite — Answers

17. Three equal angles around a point. Find each angle.

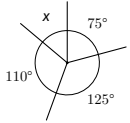


Solution

Each $= 360° \div 3$

$= 120°$

18. Find angle x.

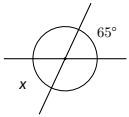


Solution

$x = 360° - 310°$

$x = 50°$

19. Two lines cross. Find angle x.

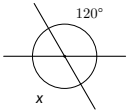


Solution

Vertically opposite:

$x = 65°$

20. Two lines cross. Find angle x.



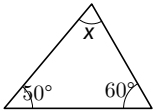
Solution

Vertically opposite:

$x = 120°$

Angles in a Triangle — Answers

21. Find angle x in the triangle.

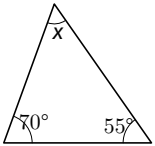


Solution

$x = 180° - 50° - 60°$

$x = 70°$

22. Find angle x in the triangle.

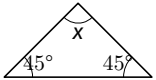


Solution

$x = 180° - 70° - 55°$

$x = 55°$

23. Find angle x in the triangle.



Solution

$x = 180° - 45° - 45°$

$x = 90°$

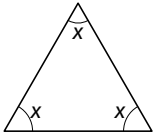
24. What is the sum of all angles in a triangle?

Solution

Angles in a triangle sum to $180°$.

Triangles & Vertically Opposite — Answers

25. An equilateral triangle has all angles equal. Find each angle.

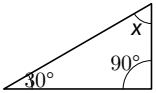


Solution

Each $= 180° \div 3$

$= 60°$

26. Find angle x in the triangle.



Solution

$x = 180° - 30° - 90°$

$x = 60°$

27. Vertically opposite angles are always... A, B, or C?

Solution

A. equal