

Angles on a Straight Line and Around a Point.

Skill 1 On a straight line

Diagram 1: A horizontal line with a line intersecting it from the top-left. The angle to the left is 120° and the angle to the right is a .

Diagram 2: A horizontal line with a line intersecting it from the top-left. The angle to the left is 57° and the angle to the right is b .

Diagram 3: A horizontal line with two lines intersecting it from the top. The left angle is c , the middle angle is 64° , and the right angle is 27° .

Diagram 4: A horizontal line with two lines intersecting it from the top. The left angle is 37° , the middle angle is d , and the right angle is 94° .

Diagram 5: A horizontal line with a vertical line and another line intersecting it from the top. The angle to the left of the vertical line is 88° , the angle between the vertical line and the other line is 24° , and the angle to the right is e .

Diagram 6: A horizontal line with two lines intersecting it from the top. The left angle is f , the middle angle is 104° , and the right angle is 31° .

Skill 2 Around a point

Diagram 1: A point with three lines intersecting it. The angles are 116° , a , 64° , and 49° .

Diagram 2: A point with three lines intersecting it. The angles are b , 87° , and 174° .

Diagram 3: A point with four lines intersecting it. The angles are 47° , c , 76° , and 106° .

Diagram 4: A point with four lines intersecting it. The angles are 127° , 98° , 26° , and d .

Diagram 5: A point with four lines intersecting it. The angles are 136° , 48° , e , and 126° .

Diagram 6: A point with four lines intersecting it. The angles are 137° , 64° , f , and 144° .

Stretch forming and solving equations

Diagram 1: A horizontal line with a vertical line and another line intersecting it from the top. The angles are $3x$, x , and $2x$.

Diagram 2: A horizontal line with two lines intersecting it from the top. The angles are 10 , $7x$, and $x + 10$.

Diagram 3: A horizontal line with two lines intersecting it from the top. The angles are $5x$, $2x$, $4x$, and $7x$.

Diagram 4: A horizontal line with two lines intersecting it from the top. The angles are $2x + 10$, 10 , x , and $x + 20$.