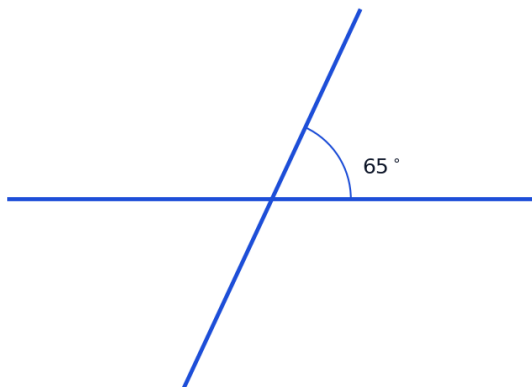


Problems | Name: _____

2.1 Angle Relationships

2.1.1. Two lines intersect. One angle measures 65° . Find the other three.

Vertical angles and linear pairs



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The angle opposite a given angle is vertical; adjacent angles form linear pairs.

2.1.2. Complementary angles measure $2x$ and $3x$ degrees. Find them.

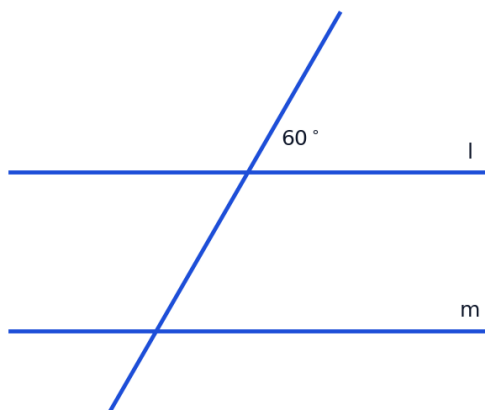
2.1.3. An angle is 24° less than its supplement. Find the angle.

Problems | Name: _____

2.2 Parallel Lines and Transversals

2.2.1. Parallel lines are cut by a transversal. One acute angle is 60° . Find the other acute angles and the obtuse angles.

Parallel lines and a transversal



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The two horizontal lines are given parallel.

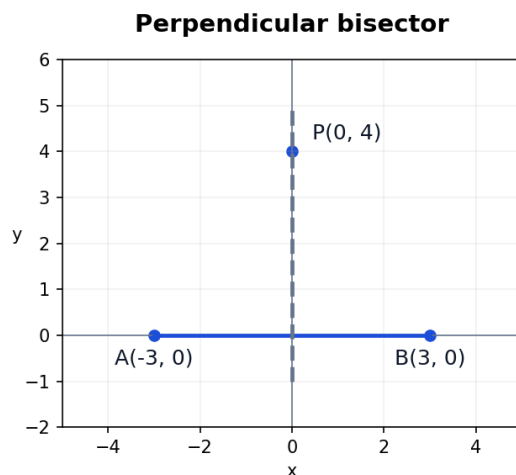
2.2.2. Alternate interior angles measure $(3x + 12)^\circ$ and $(5x - 28)^\circ$ on parallel lines. Find their measure.

2.2.3. Can equal corresponding angles prove two lines parallel?

Problems | Name: _____

2.3 Constructions

2.3.1. For $A = (-3, 0)$ and $B = (3, 0)$, give the perpendicular bisector and verify that $P = (0, 4)$ lies on it.



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Every point on $x = 0$ is equally distant from A and B.

2.3.2. Outline the construction of an angle bisector.

2.3.3. Why must the radius exceed half the segment length in the perpendicular-bisector construction?