Equation of a Line
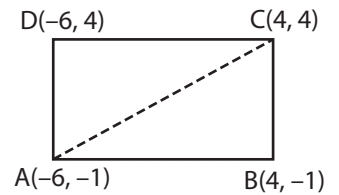
1) AC is the diagonal of the rectangle ABCD. Find the equation of the diagonal.

D(−6, 4)   C(4, 4)
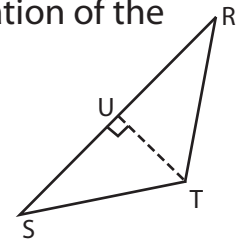
A(−6, −1)   B(4, −1)

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2) A line p cuts the x-axis at M (8, 0) and y-axis at N (0, −10). Find the equation of the line p.

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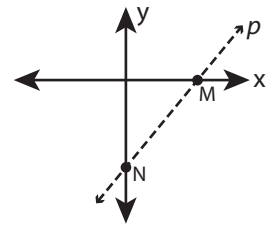
3) Find the equation of the tangent whose slope is −9 and touches the circle at the point (−2, 3).

(−2, 3)

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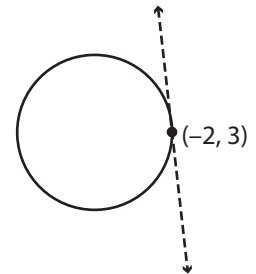
4) RST is a triangle. The equation of the line RS is $y = x + 1$ and it is perpendicular to the line UT that passes through the point (−5, −7). Find the equation of the line UT.

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5) The lines u and v intersect at the point Q(4, 3). Line v passes through the point E(−2, 9) and line u passes through the point F(1, −3). Find the equation of the lines u and v.

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