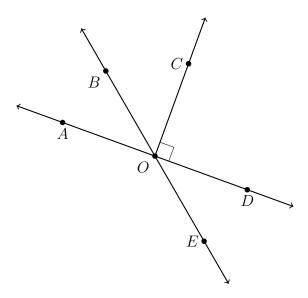
Test: I can solve for angle measures

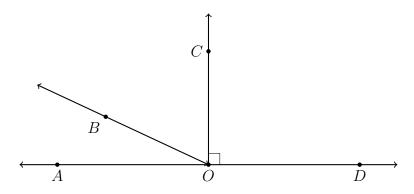
Diagrams are not necessarily drawn to scale unless otherwise stated.

1. In the diagram below $\angle BOC = 7x - 50$ and $\angle DOE = 4x - 3$. Find $m \angle AOB$.



2. In the line segment \overline{ABC} , \overline{AB} is twice as long as \overline{BC} . AB = 12x - 6 and AC = 15x + 9. Find BC.

3. In the diagram below $\angle AOB = x - 7$ and $\angle COD = \frac{3}{4}(x + 57)$. Find $\angle BOC$



4. In the following two problems, solve for the value of x.

(a)
$$\frac{4}{3}(6x-3) = x+10$$

(b)
$$\frac{2}{5}(x-1) + \frac{5}{2}(1-x) = 0$$

5. Given the linear function f(x) = -2x + 14.

(a) Find
$$f(4)$$

(b)
$$f(x) = 21$$
. Find x.

6. Given $x^2 + 9x + 8 = 0$. Factor and find the roots.

7. Write four angle measures (degrees). Use digits from 0 to 9, but no digit more than once. The top row's two angles are complementary. The second row's supplementary.



