

14) Relationship: Vertical

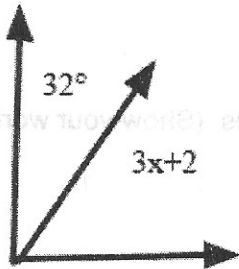
15) Equation: $180 - 4x = 134$

16) $x = \frac{46}{4} = \frac{23}{2}$

17) $m\angle DCB = 134^\circ$

18) Use the angle relationships to **write an equation** and **solve** for x. (Show your work)

What is the relationship between these two angles? Complementary



Equation: $3x + 2 + 32 = 90$

~~$x = \frac{56}{3}$~~

For each situation, **write the equation** and **solve it**.

19) Your mom will pay you 2 dollars for every chore you do around the house. How many chores do you have to do to earn \$26 dollars?

Equation: $2x = 26$

$x = 13$

$x = \#$ of chores you do around the house

20) Your friend Jose threw a frisbee 60 yards! After your throw, your gym teacher told you that you threw the frisbee 12 yards shorter than Jose. How far was your throw?

Equation: $60 - 12 = x$

$x = 48$

$x =$ How far you threw the frisbee

Solve each equation for the unknown value:

1) $3x + 2 = 8$

$x = 2$

2) $-2(x - 4) = 10$

$x = -1$

3) $\frac{2}{3}x - \frac{1}{4} = \frac{5}{4}$

$x = \frac{9}{4}$

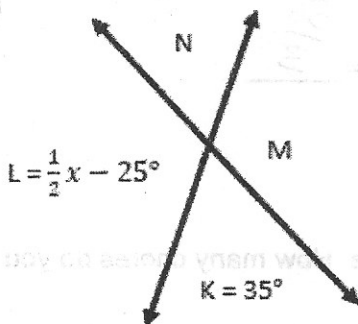
4) $\frac{x}{4} + 2 = 7$

$x = 20$

5) $\frac{1-x}{5} = 3$

$x = -14$

Use the angle relationships to write an equation and solve for the unknown values. (Show your work)



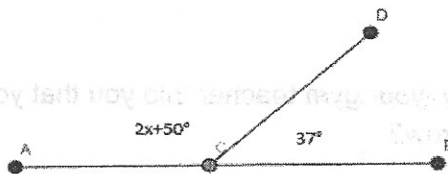
6) $m\angle N = 35^\circ$

7) $m\angle M = 145^\circ$

8) $m\angle L = 145^\circ$

9) $x = 340$

For each of the following, identify the relationship between the angles. Then write an equation and solve for the value of x. Finally, find the value of the specified angle.



10) Relationship: Supplementary

11) Equation: $2x + 50 + 37 = 180$

12) $x = \underline{93}$

13) $m\angle ACD = \underline{143^\circ}$