Solve each equation for the unknown value:
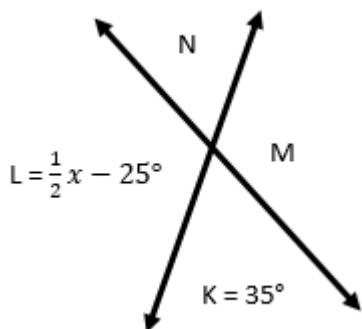
1) $3x + 2 = 8$

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

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

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

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

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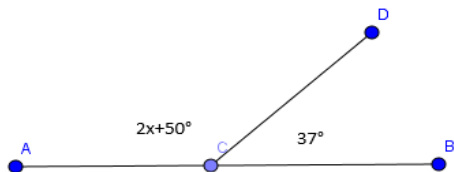

$L = \frac{1}{2}x - 25°$

$K = 35°$

6) m∠N _____

7) m∠M _____

8) m∠L = _____

9) x = _____

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.
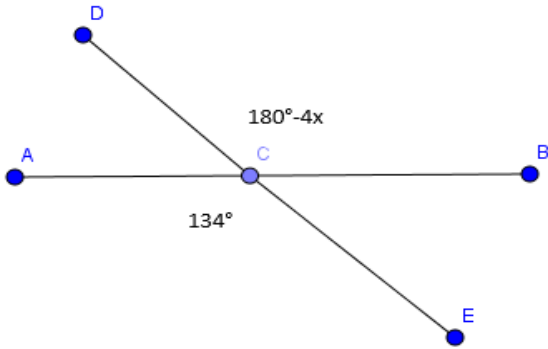

2x+50°   37°

10) Relationship: _____

11) Equation:

12) $x =$ _____

13) m∠ACD = _____

14) Relationship: _____

15) Equation:

D

180°-4x

A   C   B

134°
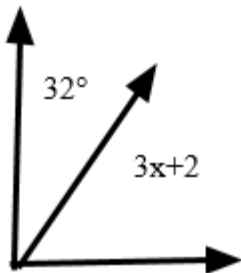
E

16) $x =$ _____   17) m∠DCB = _____

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

What is the relationship between these two angles? _____

32°

Equation:

3x+2

$x =$ _____

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: x= _____

20) Your friend Jose threw a frisbee put 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: x = _____