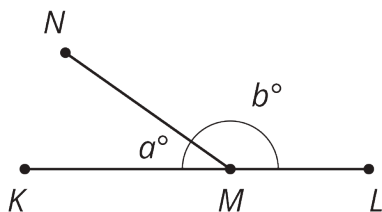
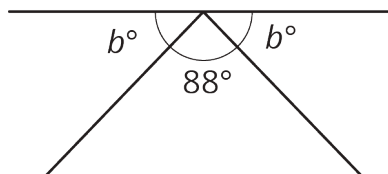


## Lesson 4 Practice Problems

1.  $M$  is a point on line segment  $KL$ .  $NM$  is a line segment. Select **all** the equations that represent the relationship between the measures of the angles in the figure.

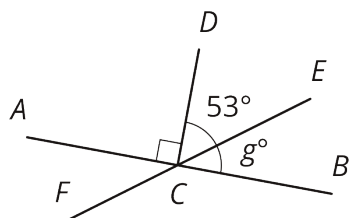


- A.  $a = b$
  - B.  $a + b = 90$
  - C.  $b = 90 - a$
  - D.  $a + b = 180$
  - E.  $180 - a = b$
  - F.  $180 = b - a$
2. Which equation represents the relationship between the angles in the figure?



- A.  $88 + b = 90$
- B.  $88 + b = 180$
- C.  $2b + 88 = 90$
- D.  $2b + 88 = 180$

3. Segments  $AB$ ,  $EF$ , and  $CD$  intersect at point  $C$ , and angle  $ACD$  is a right angle. Find the value of  $g$ .



4. Select **all** the expressions that are the result of decreasing  $x$  by 80%.

- A.  $\frac{20}{100}x$
- B.  $x - \frac{80}{100}x$
- C.  $\frac{100-20}{100}x$
- D.  $0.80x$
- E.  $(1 - 0.8)x$

(From Unit 6, Lesson 12.)

5. Andre is solving the equation  $4(x + \frac{3}{2}) = 7$ . He says, "I can subtract  $\frac{3}{2}$  from each side to get  $4x = \frac{11}{2}$  and then divide by 4 to get  $x = \frac{11}{8}$ ." Kiran says, "I think you made a mistake."

- a. How can Kiran know for sure that Andre's solution is incorrect?
- b. Describe Andre's error and explain how to correct his work.

(From Unit 6, Lesson 8.)

6. Solve each equation.

$$\frac{1}{7}a + \frac{3}{4} = \frac{9}{8}$$

$$\frac{2}{3} + \frac{1}{5}b = \frac{5}{6}$$

$$\frac{3}{2} = \frac{4}{3}c + \frac{2}{3}$$

$$0.3d + 7.9 = 9.1$$

$$11.03 = 8.78 + 0.02e$$

(From Unit 6, Lesson 7.)

7. A train travels at a constant speed for a long distance. Write the two constants of proportionality for the relationship between distance traveled and elapsed time. Explain what each of them means.

time elapsed (hr)	distance (mi)
1.2	54
3	135
4	180

(From Unit 2, Lesson 5.)