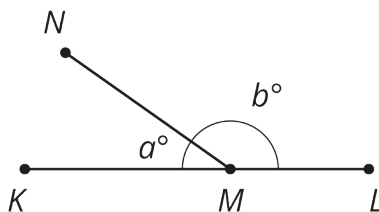
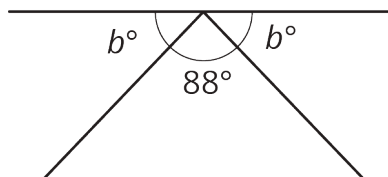


Unit 7 Lesson 4 Cumulative Practice Problems

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.

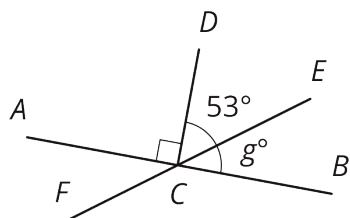


- A. $a = b$
 - B. $a + b = 90$
 - C. $b = 90 - a$
 - D. $a + b = 180$
 - E. $180 - a = b$
 - F. $180 = b - a$
2. Which equation represents the relationship between the angles in the figure?



- 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.)