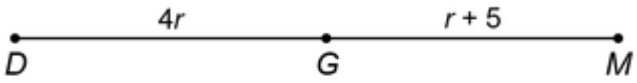
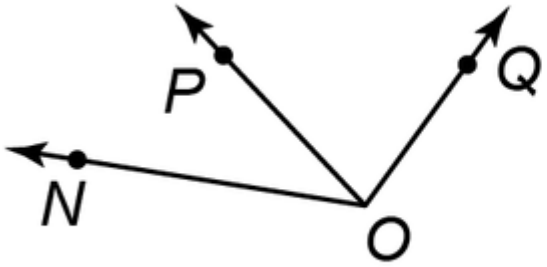
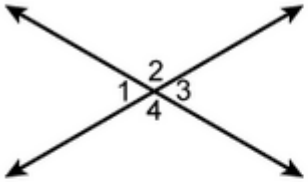
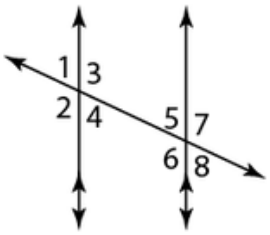
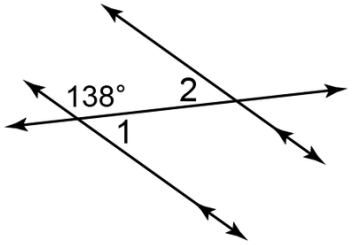
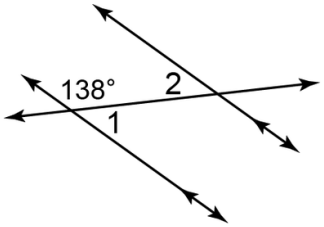
FCPS Geometry Common Assessment 1 **Name _____**

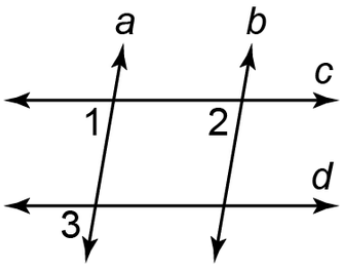
Question Number	Question
1	If $DM = 60$, what is the value of r?  ○ A. 11 ○ B. 55 ○ C. 13 ○ D. 65
2	Point P is in the interior of $\angle NOQ$. If $m\angle NOP = 37°$ and $m\angle NOQ = 123°$, what is $m\angle POQ$?  $m\angle POQ =$ ☐ °
3	The angle bisector of $\angle PQR$ is $\overrightarrow{QE}$. If $m\angle PQE = 2n°$, what is $m\angle PQR$? ○ A. $n°$ ○ B. $2n°$ ○ C. $4n°$ ○ D. $8n°$
4	What is the distance between points $F(2, 9)$ and $G(-2, 6)$? Round to the nearest whole number. Distance = ☐

5	What is the value of x?  ○ A. 11 ○ B. 12 ○ C. 23 ○ D. 46
6	**Use the diagram shown.**  Which theorem or postulate justifies the statement below? *Angle 1 is congruent to angle 3.* ○ A. Congruent Supplements Theorem ○ B. Linear Pairs Theorem ○ C. Angle Addition Postulate ○ D. Verticle Angles Theorem
7	What types of lines are coplanar and intersect at a right angle? ○ A. parallel ○ B. perpendicular ○ C. skew ○ D. transversal

8	Which pairs of angles are corresponding angles? Select all that apply.  ☐ A. ∠1 and ∠5 ☐ B. ∠1 and ∠2 ☐ C. ∠2 and ∠8 ☐ D. ∠3 and ∠7 ☐ E. ∠4 and ∠8 Hint: There are more than two correct answers.
9	**Use the parallel lines shown.**  What is $m\angle 1$? ○ A. 42° ○ B. 48° ○ C. 96° ○ D. 138°
10	**Use the parallel lines shown.**  What is $m\angle 2$? ○ A. 42° ○ B. 48° ○ C. 96° ○ D. 138°

11

Use the diagram shown.

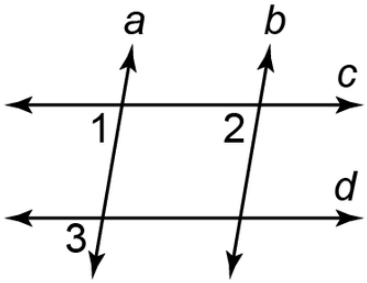


If $\angle 1 \cong \angle 3$, which conclusion can be made?

- A. $a \parallel b$
- B. $c \parallel d$
- C. $c \perp a$
- D. $b \perp d$

12

Use the diagram shown.

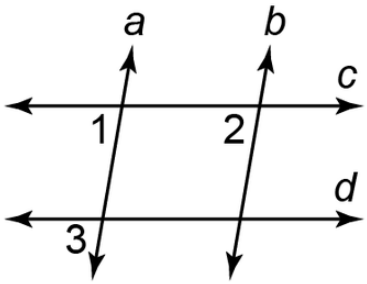


If $\angle 1 \cong \angle 2$, which conclusion can be made?

- A. $a \parallel b$
- B. $c \parallel d$
- C. $c \perp a$
- D. $b \perp d$

13

Use the diagram shown.

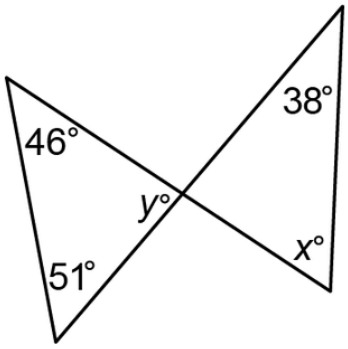


If $a \parallel b$ and $m\angle 1 = 65°$, what is $m\angle 2$?

$m\angle 2 =$ [ ] °

14

Use the figure shown.

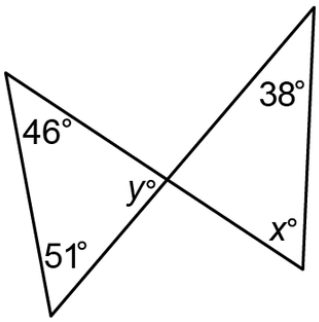


What is the value of y?

- A. 83
- B. 89
- C. 96
- D. 97

15

Use the figure shown.

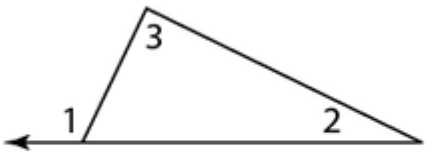


What is the value of x?

- A. 38
- B. 59
- C. 83
- D. 96

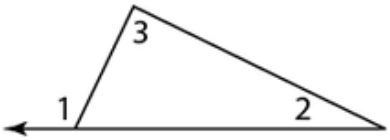
16

Use the triangle shown.



If $m\angle 1 = 98°$ and $m\angle 2 = 19°$, what is $m\angle 3$?

$m\angle 3 =$ [ ] °

17	Use the triangle shown.  If $m\angle 2 = 23°$ and $m\angle 3 = 68°$, what is $m\angle 1$? ○ A. 23° ○ B. 68° ○ C. 89° ○ D. 91°
18	If $m \parallel n$ and the slope of line m is 3, what is the slope of line n? ○ A. $\frac{1}{3}$ ○ B. $-\frac{1}{3}$ ○ C. -3 ○ D. 3
19	What is the equation of a line that is perpendicular to the line $y = -\frac{2}{3}x - 7$ and passes through the point $(-4, 2)$? ○ A. $y = -\frac{2}{3}x + 4$ ○ B. $y = \frac{3}{2}x + 8$ ○ C. $y = \frac{2}{3}x + 6$ ○ D. $y = -\frac{2}{3}x + 8$
20	Which equation represents a line that is parallel to the line with equation $y = 2x + 1$? Select all that apply. ☐ A. $y = 2x - 8$ ☐ B. $y = -2x + 1$ ☐ C. $2x + y = 7$ ☐ D. $-2x + y = 2$ ☐ E. $-2x - y = 9$