

7

3

A) 35°
B) 55°
C) 70°
D) 145°

In the figure above, lines l and m are parallel and lines s and t are parallel. If the measure of $\angle 1$ is 35° , what is the measure of $\angle 2$?

8

5

Note: Figure not drawn to scale.

In the figure above, lines l and m are parallel, $y = 20$, and $z = 60$. What is the value of x ?

A) 120
B) 100
C) 90
D) 80

9

7

In triangle ABC above, side \overline{AC} is extended to point D . What is the value of $y - x$?

A) 40
B) 75
C) 100
D) 140

10

7

In the figure above, lines j , k , and l intersect as shown. Which of the following must be equal to y ?

A. $90 - x$
B. $180 - x$
C. $180 - 2x$
D. $360 - 2x$

11

5

Note: Figure not drawn to scale.

In the figure above, \overline{BC} and \overline{AD} are parallel, \overline{AB} and \overline{EC} are parallel, $CD = CE$, and the measure of $\angle ABC$ is 115° . What is the measure of $\angle BCD$?

A) 85° C) 125°
B) 115° D) 140°

12

5

Quadrilateral $ABCD$ is shown. Which equation shows how the measures of the angles of the quadrilateral are related?

A) $x + 90 + (2x - 5) + (x + 35) = 360$
B) $4(x + 90 + (2x - 5) - (x + 35)) = 360$
C) $x + (2x - 5) + (x + 35) = 360$
D) $4(x + (2x - 5) + (x - 35)) = 360$

1 D
2 7
3 B

4 B
5 C
6 A

7 D
8 B
9 C

10 C
11 B
12 A

1

3

For line segment \overline{AC} shown, the length of line segment \overline{BC} is 2 times the length of line segment \overline{AB} . Which equation represents this situation?

A) $x + 2 = 20$
 B) $x + 20 = 2$
 C) $x - 2(20)$
 D) $2x = 20$

2

33

Note: Figure not drawn to scale.

On \overline{PS} above, $PQ = RS$. What is the length of \overline{PS} ?

3

1

Two lines intersect as shown. What is the value of x ?

A) 15
 B) 20
 C) 25
 D) 30

4

11

In the figure above, lines k , l , and m intersect at a point. If $x + y = u + w$, which of the following must be true?

I. $x = z$
 II. $y = w$
 III. $z = t$

A) I and II only
 B) I and III only
 C) II and III only
 D) I, II, and III

Note: Figure not drawn to scale.

5

8

A) 18
 B) 36
 C) 54
 D) 72

In the figure above, point B lies on \overline{AD} . What is the value of $3x$?

6

2

A) 40
 B) 60
 C) 80
 D) 100

In the figure shown, line j is parallel to line k and line l is parallel to line m . What is the value of x ?