

Test Name: Copy of 23-24 Practice assessment questions

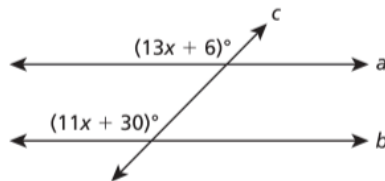
Test Id: 3395191

Date: 03/12/2024

Section

1.

In the figure shown below, lines a and b are parallel, and line c is a transversal.

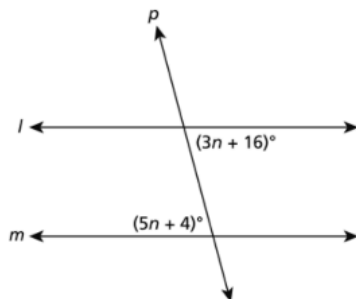


What is the value of x ?

- A 6
- B 9
- C 12
- D 18

- A. A
- B. B
- C. C
- D. D

Lines l and m are parallel and intersect transversal p , as shown in the diagram below.



What is the value of n ?

- A 6
- B 10
- C 20
- D 24

2.

A. A

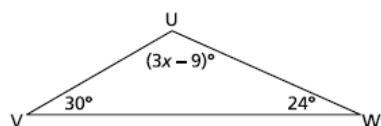
B. B

C. C

D. D

3.

The measures of the angles in triangle UVW are shown in the diagram below.



What is the value of x ?

A 21

B 39

C 45

D 126

A. A

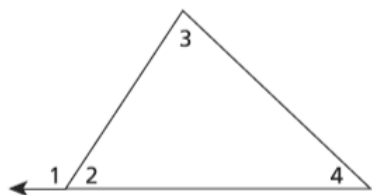
B. B

C. C

D. D

4.

Mya claims $(m\angle 3 + m\angle 4) = m\angle 1$, as shown in the triangle below.



Which equations explain why Mya's claim must be true?

- A $(m\angle 1 + m\angle 2) = 90^\circ$ and $(m\angle 3 + m\angle 4) = 90^\circ$
- B $(m\angle 1 + m\angle 2) = 180^\circ$ and $(m\angle 3 + m\angle 4) = 180^\circ$
- C $(m\angle 1 + m\angle 2) = 90^\circ$ and $(m\angle 3 + m\angle 4 + m\angle 2) = 90^\circ$
- D $(m\angle 1 + m\angle 2) = 180^\circ$ and $(m\angle 3 + m\angle 4 + m\angle 2) = 180^\circ$

A. A

B. B

C. C

D. D

5. Which equation represents the table below?

| x | y |
|----------|----------|
| 0 | 5 |
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |

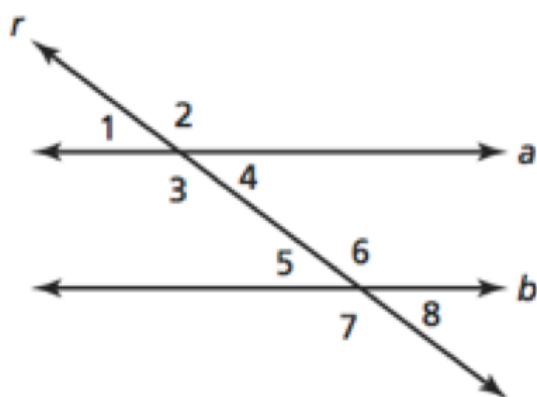
A. $y = x + 4$

B. $y = x + 5$

C. $y = x - 4$

D. $y = x - 5$

6. In the diagram below, line a is parallel to line b , and line r is a transversal. Which pair of angles is congruent?



[not drawn to scale]

- A. $\angle 1$ and $\angle 6$
- B. $\angle 1$ and $\angle 7$
- C. $\angle 2$ and $\angle 7$
- D. $\angle 3$ and $\angle 5$
7. What is the value of x in the equation $5(2x - 7) = 15x - 10$?
- A. 1
- B. 0.6
- C. -5
- D. -9

8. A line has a rate of change $-\frac{3}{2}$ and a y-intercept 6. What is the equation of the line?

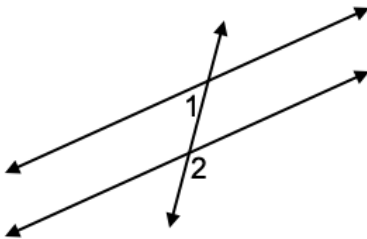
A. $y = -\frac{3}{2}x + 6$

B. $y = 6x - \frac{3}{2}$

C. $y = -\frac{3}{2}x - 6$

D. $y = -6x - \frac{3}{2}$

9. The diagram below shows two parallel lines cut by a transversal. If $m\angle 1 = 4x + 14$ and $m\angle 2 = 8x + 10$ what is the value of x ?



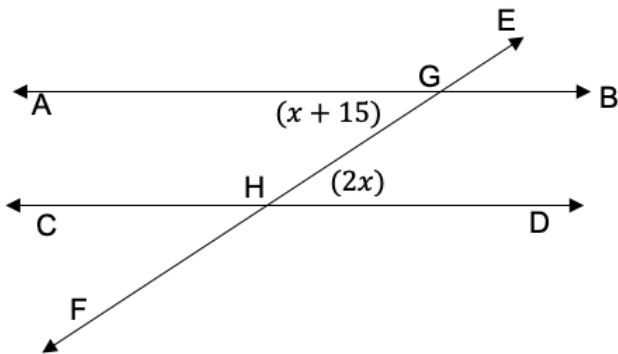
A. $x = 1$

B. $x = 13$

C. $x = 6$

D. $x = 17$

10. In the accompanying diagram, parallel lines \overleftrightarrow{AB} and \overleftrightarrow{CD} are intersected by transversal \overleftrightarrow{EF} at points G and H, respectively, $m\angle AGH = (x + 15)^\circ$ and $m\angle GHD = (2x)^\circ$.



Find the value of x.

- A. 30
- B. 55
- C. 15
- D. 10

11.

The steps a student took to solve an equation are shown below.

$$\frac{3}{4}(-8x + 20) = -8(-x - 3)$$

Step 1: $-6x + 15 = 8x + 24$

Step 2: $15 = 2x + 24$

Step 3: $-9 = 2x$

Step 4: $x = -\frac{9}{2}$

What error did the student make and what is the correct value of x ?



You have reached the end of this section.