



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



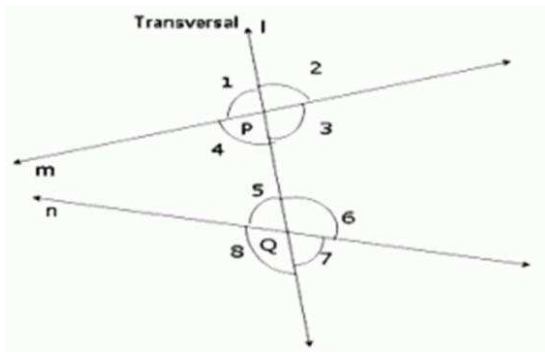
Sub: Algebra and Geometry
Duration: 40 min

Class: 7
Worksheet Solutions 21
PARALLEL LINES

Date: 27.03.21
Full Marks: 15

Choose the Correct options:

1. In the given figure, line l is the transversal intersecting the two lines m and n at P and Q . Which of the following is the pair of alternate interior angles?

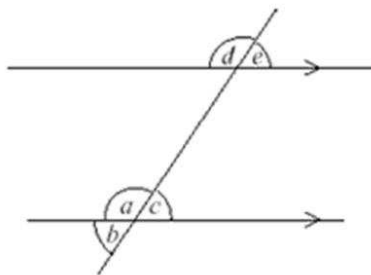


- a) $\angle 3$ and $\angle 5$
- b) $\angle 3$ and $\angle 7$
- c) $\angle 1$ and $\angle 7$
- d) $\angle 1$ and $\angle 5$

2. Line a makes an angle of 30 degrees with the line b , also line c makes an angle of 30 degrees with line b . Then, _____ .

- a) line $a \parallel$ line c
- b) line $a \perp$ line b
- c) line $a \parallel$ line b
- d) line $a \perp$ line c

3. In the figure below, the angle $a = 150^\circ$. The other angle in the figure which is also 150° is:

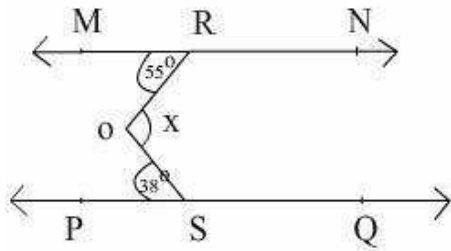


- a) e
- b) b
- c) d
- d) c

4. If a transversal intersects two parallel lines, then each pair of corresponding angles is

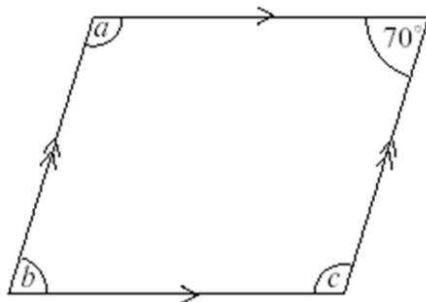
- a) Parallel
- b) Perpendicular
- c) Equal**
- d) Different

5. In the figure, $PQ \parallel MN$, the value of x will be



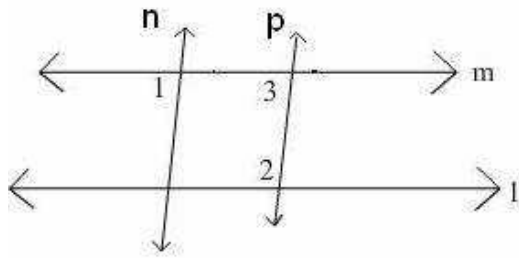
- a) 85°
- b) 93°**
- c) 90°
- d) 100°

6. The figure below shows a parallelogram. What is the measure of $\angle b$?



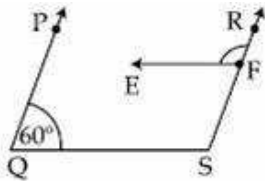
- a) 90°
- b) 70°**
- c) 110°
- d) 100°

7. In the figure if $l \parallel m$, $n \parallel p$ and $\angle 1 = 85^\circ$, then $\angle 2$ is equal to



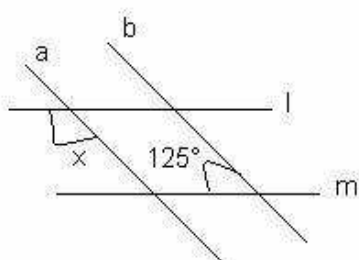
- a) 66°
- b) 45°
- c) 40°
- d) 95°**

8. In the given figure, $PQ \parallel RS$ and $EF \parallel QS$. If $\angle PQS = 60^\circ$, then the measure of $\angle RFE$ is:

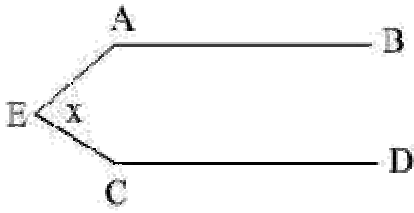


- a) 60°
- b) 120°**
- c) 180°
- d) 115°

9. In the following figure, the value of x is



- a) 125°**
- b) 55°
- c) 60°
- d) 45°

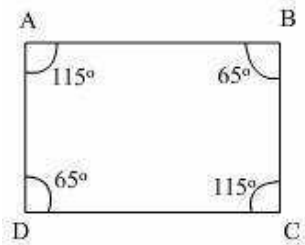


10. In the above figure $AB \parallel CD$. Also, $\angle EAB = 114^\circ$ and $\angle ECD = 126^\circ$. Then, the value of "x" is

In the above figure $AB \parallel CD$. Also, $\angle EAB = 114^\circ$ and $\angle ECD = 126^\circ$. Then, the value of "x" is

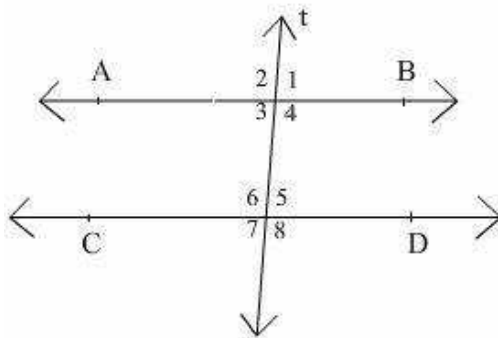
- a) 80°
- b) 150°
- c) **120°**
- d) 160°

11. Observe the given figure and choose the correct statement



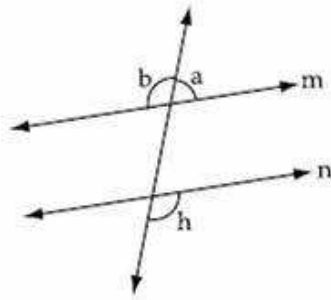
- a) $AB \parallel AD$
- b) $BC \parallel DC$
- c) $AD \parallel CD$
- d) **$AB \parallel CD$**

12. In the figure, $AB \parallel CD$. If $\angle 2 = (2x + 30)^\circ$, $\angle 4 = (x + 2y)^\circ$ and $\angle 6 = (3y + 10)^\circ$ the measure of $\angle 5$ is



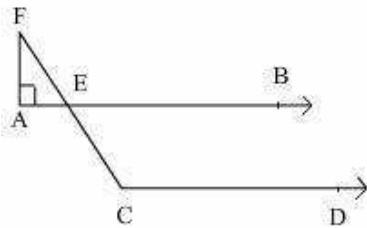
- a) 90°
- b) 50°
- c) 60°
- d) **40°**

13. In fig., if $m \parallel n$ and $\angle a : \angle b = 2 : 3$, the measure of $\angle h$ is



- a) 72°
- b) 120°
- c) **108°**
- d) 150°

14. In the figure, $AB \parallel CD$ and $\angle F = 30^\circ$ the value of $\angle ECD$ is



- a) 110°
- b) 109°
- c) **120°**
- d) 105°

15. If two parallel lines are intersected by a transversal then, pair of alternate interior angles are:

- a) **Equal**
- b) Sum of the two angles is 360°
- c) Complementary
- d) Supplementary