



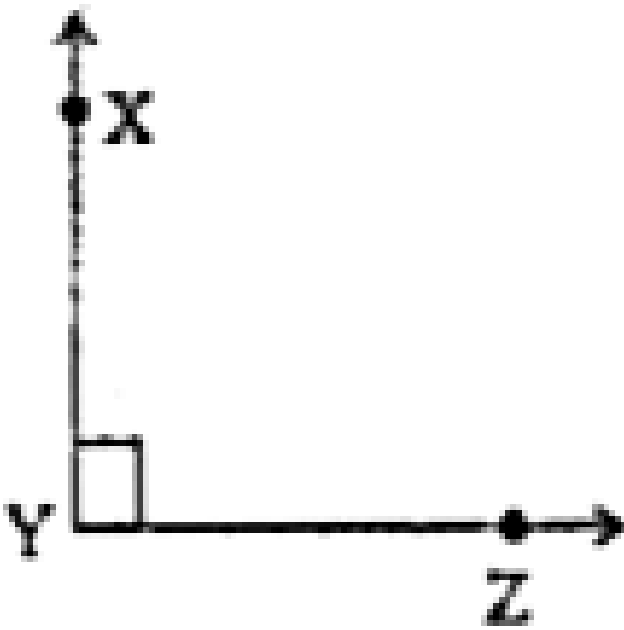
MATHS

BOOKS - SWAN PUBLICATION

LINES AND ANGLES

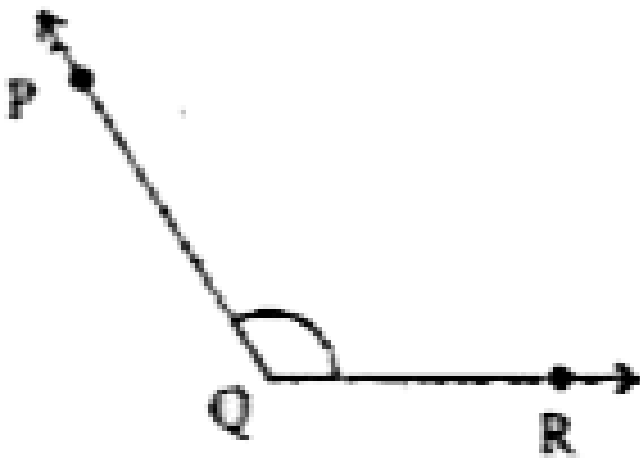
Exercise 5 1

1. Name each of the following as acute, obtuse, right ,straight or a reflex angle.



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2. Name each of the following as acute, obtuse, right straight or a reflex angle.



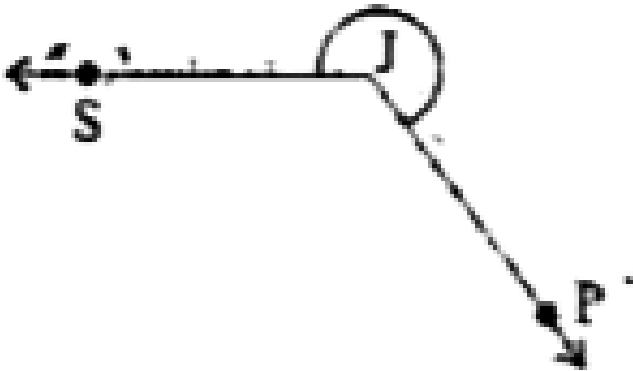
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3. Name each of the following as acute, obtuse, right straight or a reflex angle.



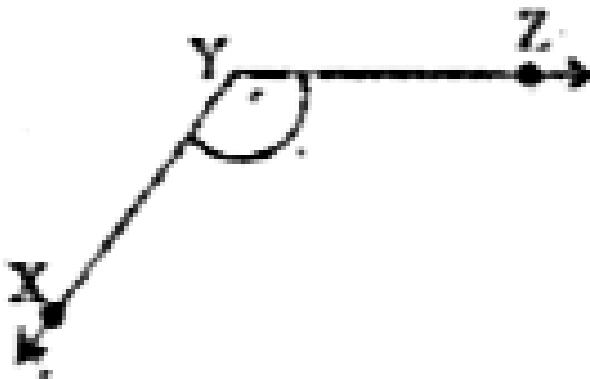
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4. Name each of the following as acute, obtuse, right straight or a reflex angle.



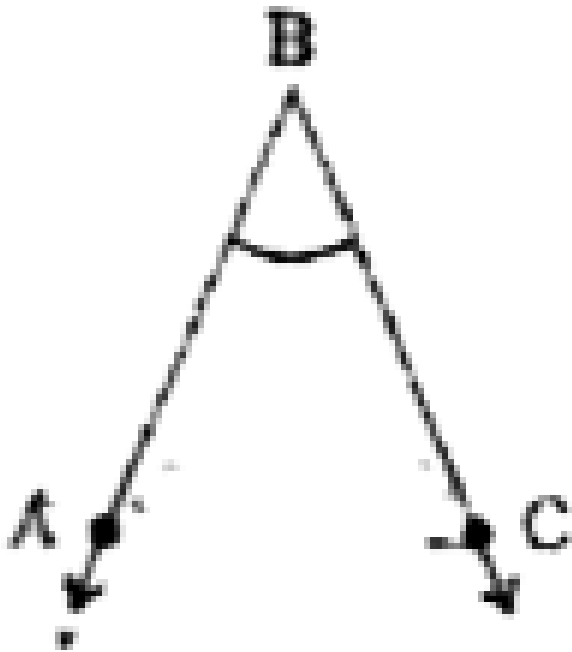
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5. Name each of the following as acute, obtuse, right straight or a reflex angle.



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6. Name each of the following as acute, obtuse, right straight or a reflex angle.



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7. Write the complement of each of the following angles

53°



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8. Write the complement of each of the following angles

90°



[Watch Video Solution](#)

9. Write the complement of each of the following angles

85°



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10. Write the complement of each of the following angles

$\frac{4}{9}$ of a right angle



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11. Write the complement of each of the following angles

0°



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12. Write the supplement of each of the following angle

55°



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13. Write the supplement of each of the following angle

105°



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14. Write the supplement of each of the following angle

100°



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15. Write the supplement of each of the following angle

$\frac{2}{3}$ of a right angle



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16. Write the supplement of each of the following angle

$\frac{1}{3}$ of 270°



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17. Identify the following pairs of angles as complementary or supplementary.

65° and 115°



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18. Identify the following pairs of angles as complementary OR supplementary.

55° and 35°



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19. Identify the following pairs of angles as complementary or supplementary.

120° and 60°



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20. Two complementary angles are in the ratio of 3: 6 find the angles.



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21. Two supplementary angles are in the ratio of 5: 13 find the angles.



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22. Find the angle which is equal to its complement.

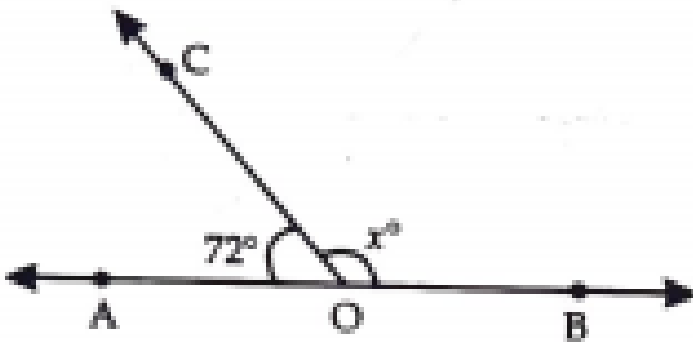


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23. Find the angle which is equal to its supplement.

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24. In the fig AOB is a straight line. Find the value of x

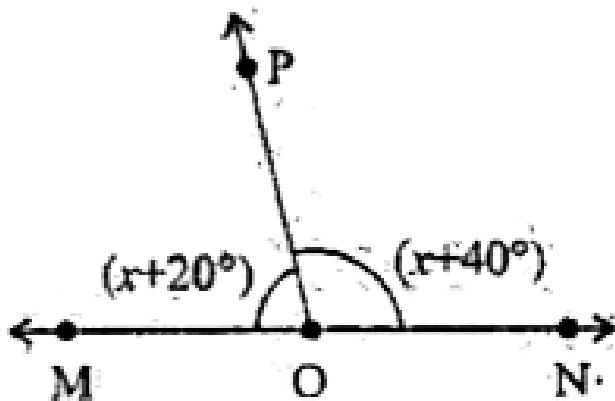


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25. In the given figure, MON is straight line

find

$\angle MOP$

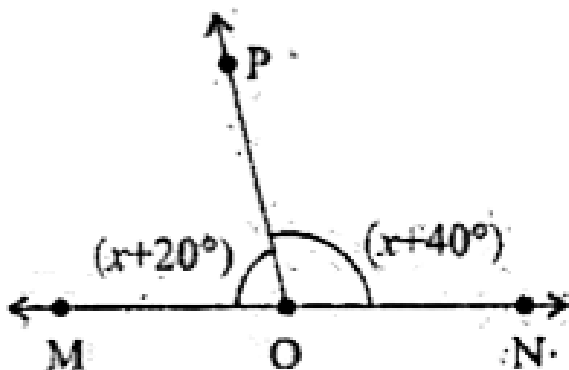


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26. In the given figure, MON is straight line

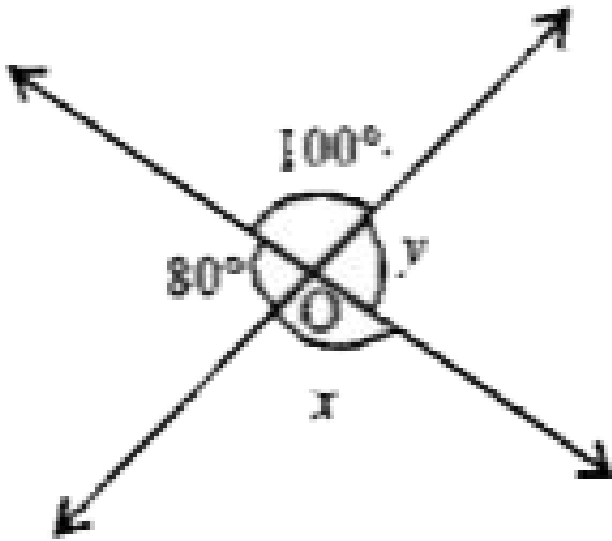
find

$\angle NOP$



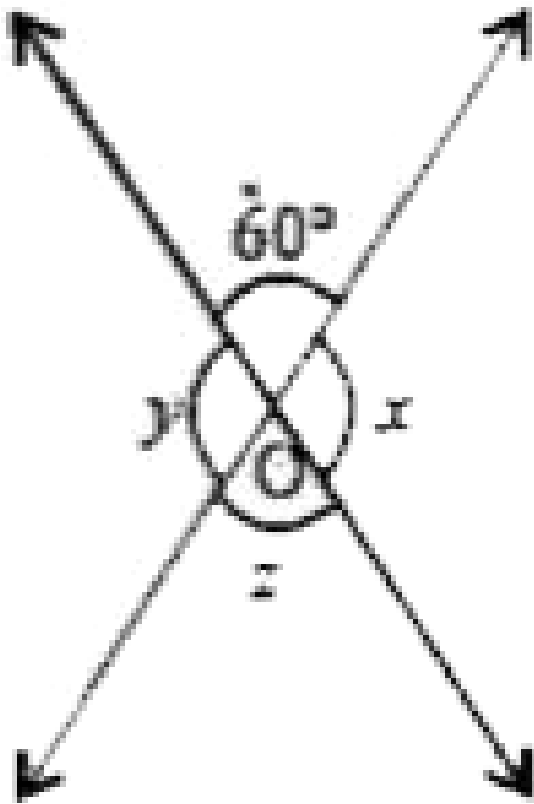
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27. Find the value of x, y and z in each of following.



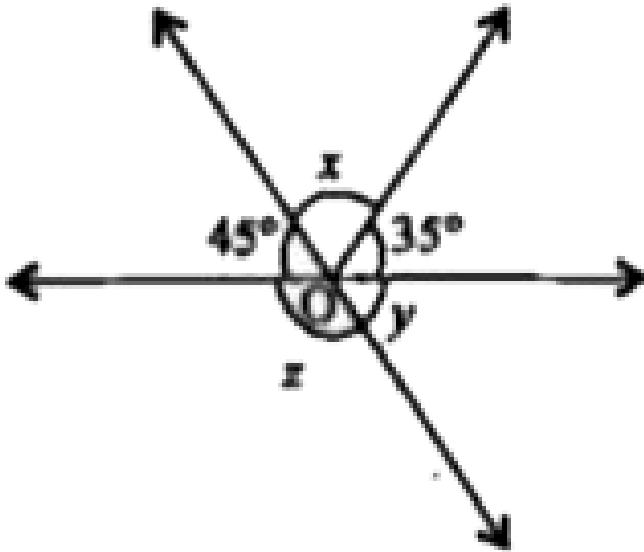
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28. Find the value of x, y and z in each of following.



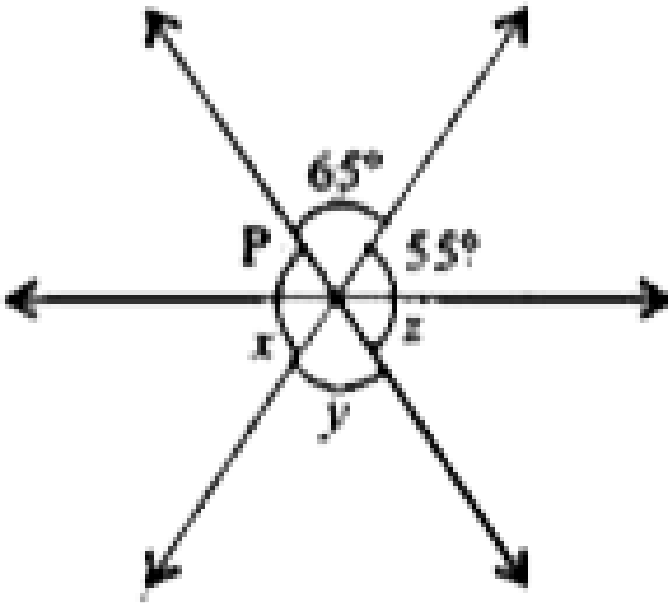
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29. Find the value of x, y, z and p in each of following.



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30. Find the value of x, y and p in each of following.



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Exercise 5 1 Multiple Choice Question Choose The Correct Option

1. Fill in the blanks:

If two angles are complementary, then the sum of their measures is _____.

A. 180°

B. 90°

C. 360°

D. none of these

Answer: B



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2. Two angles are calledif the sum of their measures is 180° .

A. supplementary

B. complementary

C. right

D. none of these

Answer: A



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3. If two adjacent angles are supplementary then, they form a

A. right angle

B. vertically opposite angles

C. linear pair

D. corresponding angles

Answer: C



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4. If two lines intersect at a point, the vertically opposite angles are always

A. equal

B. zero

C. 90°

D. none of these

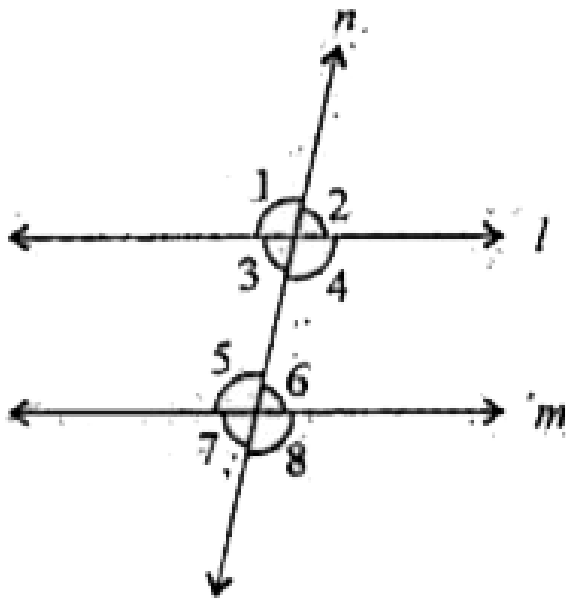
Answer: A



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Exercise 5 2

1. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.



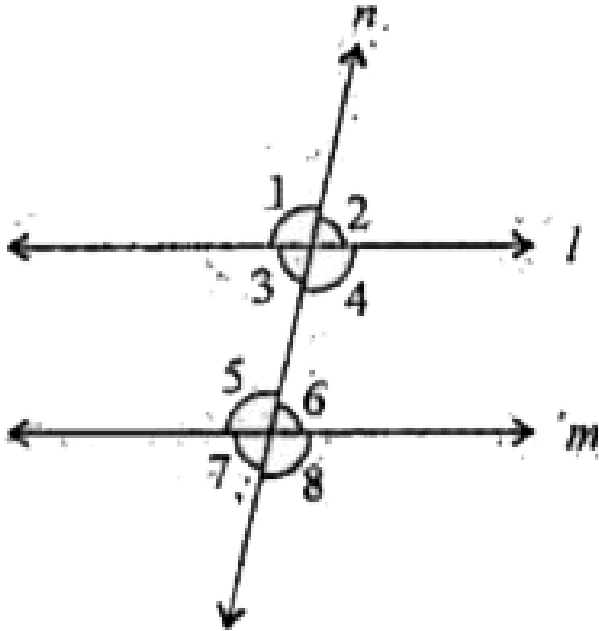
$\angle 3$ and $\angle 6$



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2. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles,

adjacent angles, vertically opposite angles co-interior angles and linear pairs.

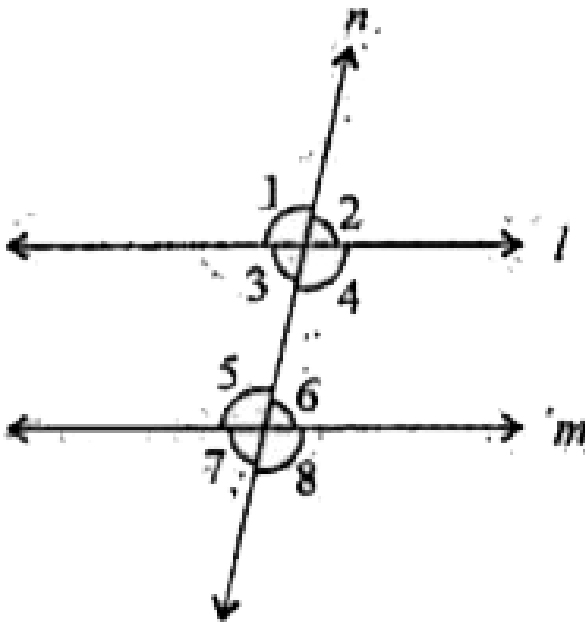


$\angle 3$ and $\angle 7$



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3. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.

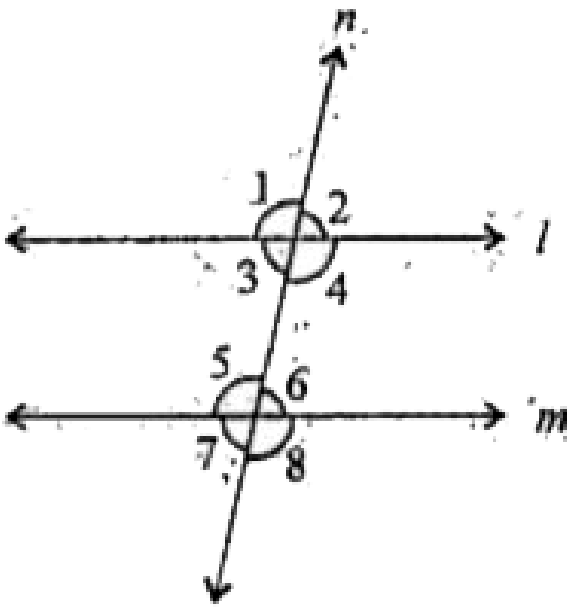


$\angle 2$ and $\angle 4$



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4. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.



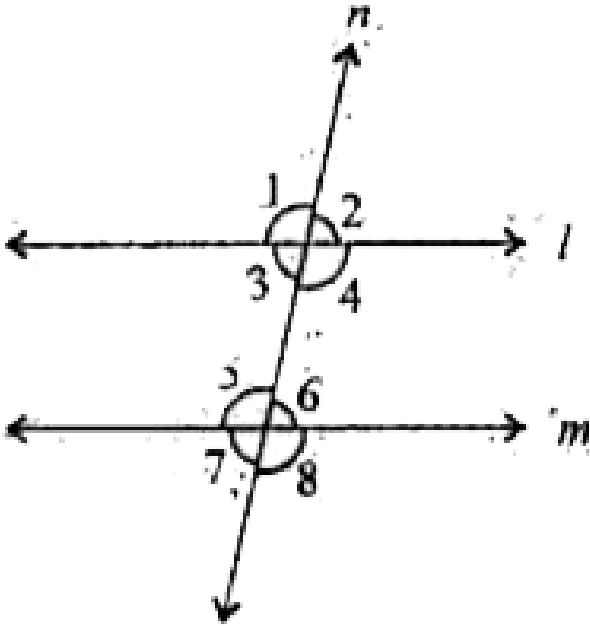
$\angle 2$ and $\angle 7$



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5. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles,

adjacent angles, vertically opposite angles co-interior angles and linear pairs.

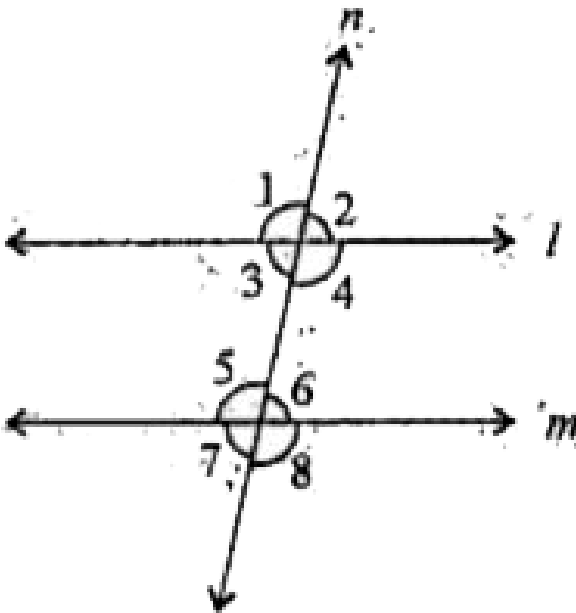


$\angle 1$ and $\angle 8$



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6. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.

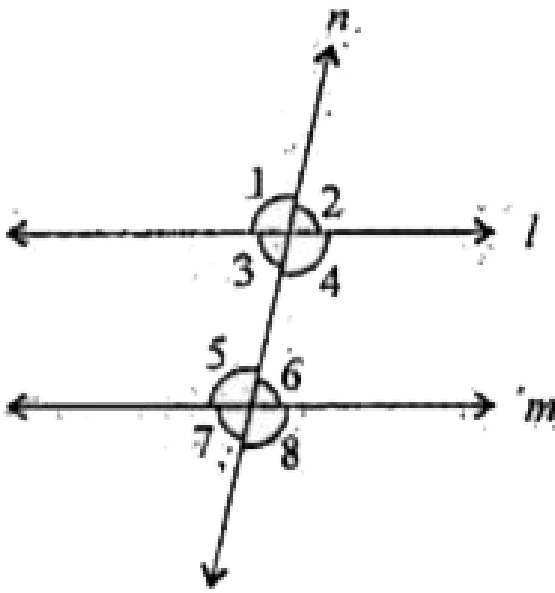


$\angle 4$ and $\angle 6$



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7. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.



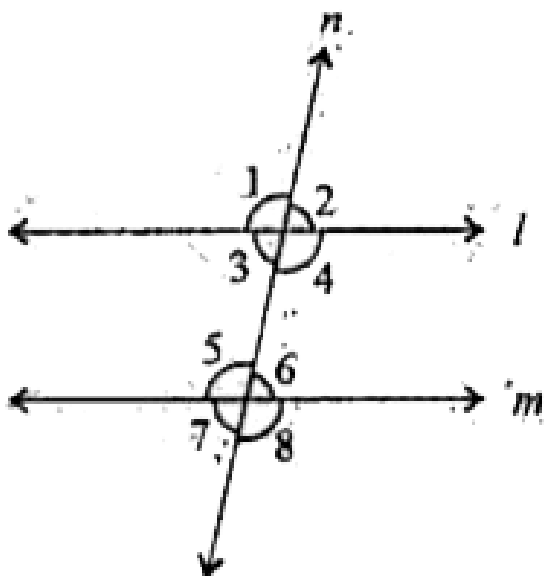
$\angle 1$ and $\angle 5$



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8. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles,

adjacent angles, vertically opposite angles co-interior angles and linear pairs.

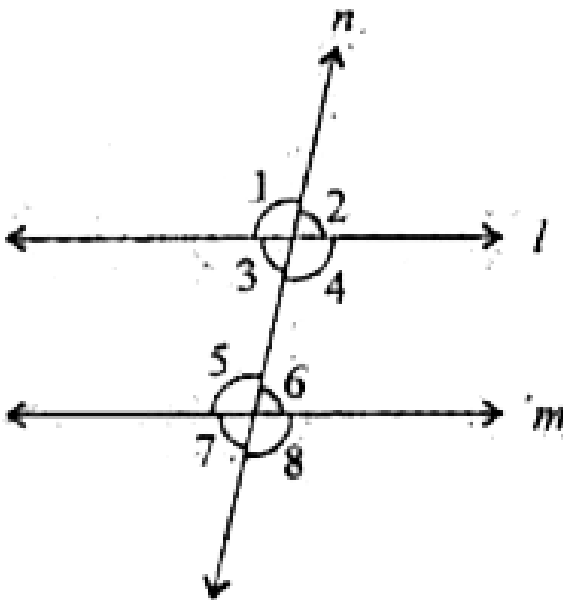


$\angle 1$ and $\angle 4$



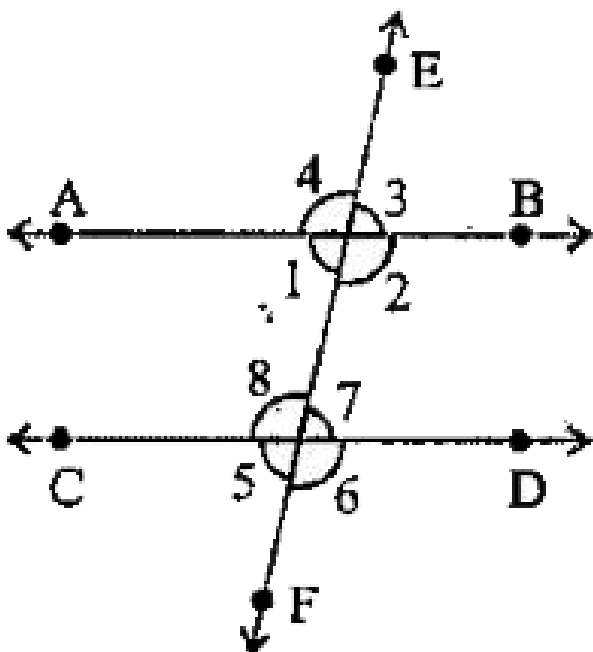
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9. In the figure question identify the pair of angles as corresponding angles, alternate interior angles, exterior alternate angles, adjacent angles, vertically opposite angles co-interior angles and linear pairs.



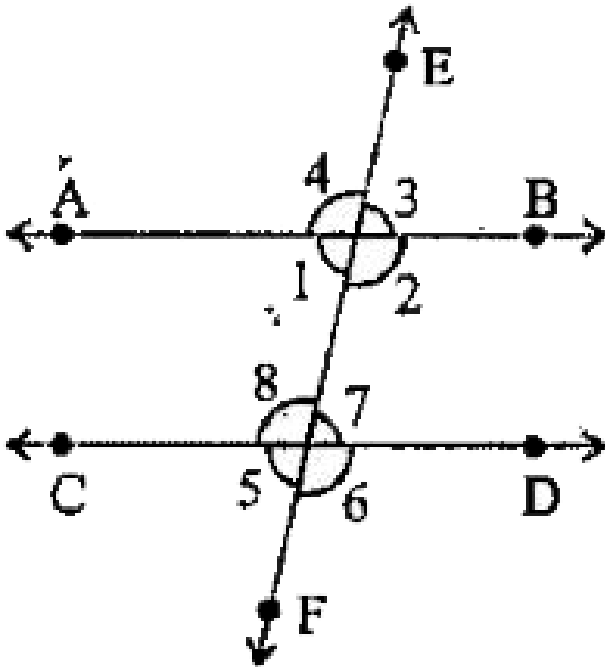
$\angle 5$ and $\angle 7$

10. In the figure identify.



The pairs of corresponding angle.

11. In the figure identify.

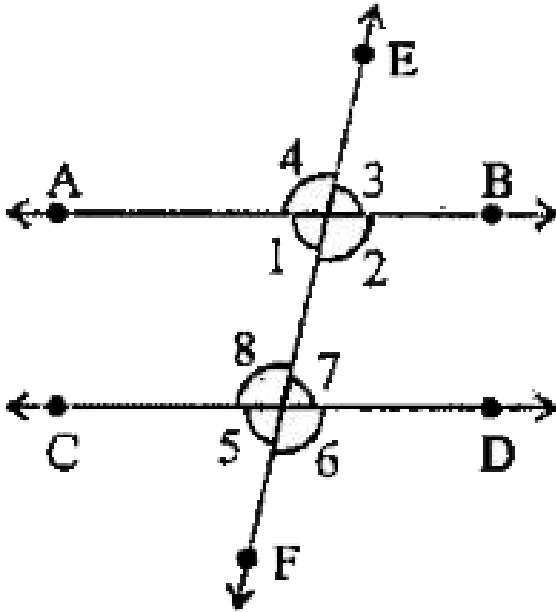


The pairs of alternate interior angles.



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12. In the figure identify.

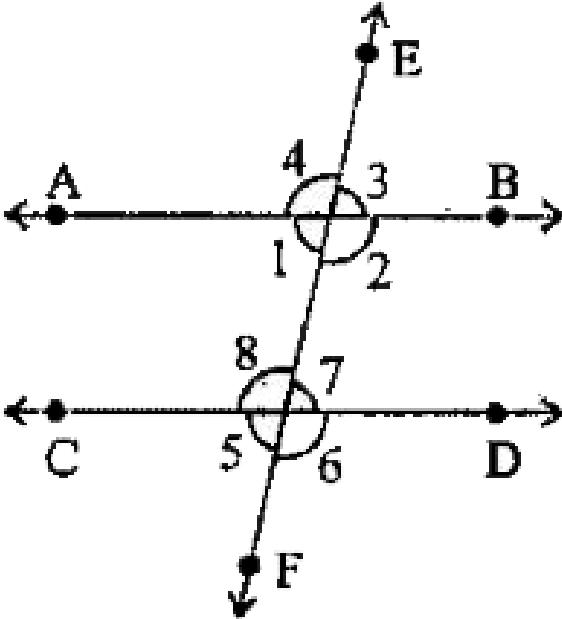


The pairs of interior angles on the same side of the transversal.



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13. In the figure identify.

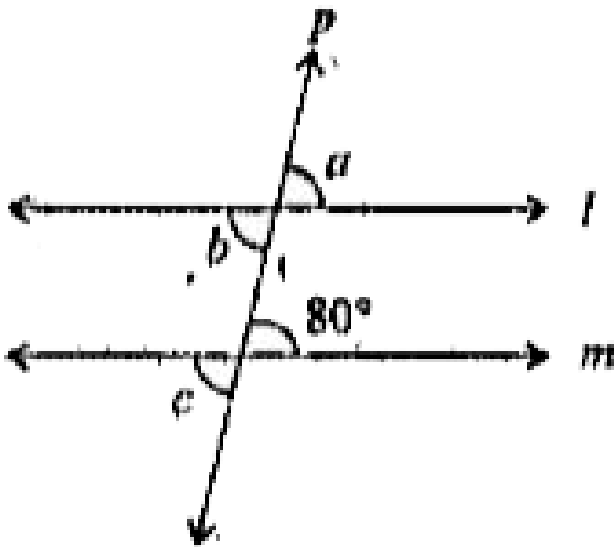


The pairs of vertically opposite angles.



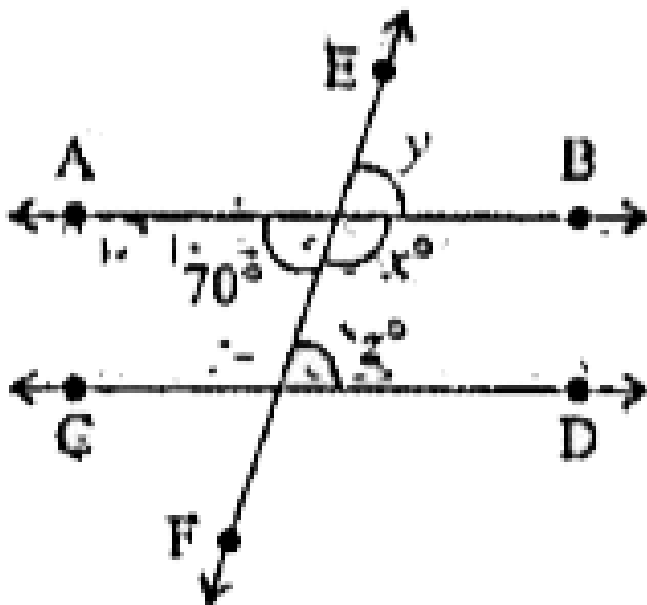
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14. In the given figures, the intersected line are parallel to each other. Find the unknown angles.



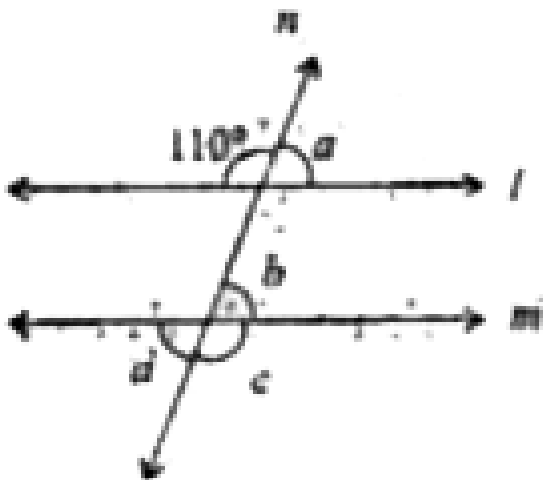
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15. In the given figures, the intersected line are parallel to each other. Find the unknown angles.



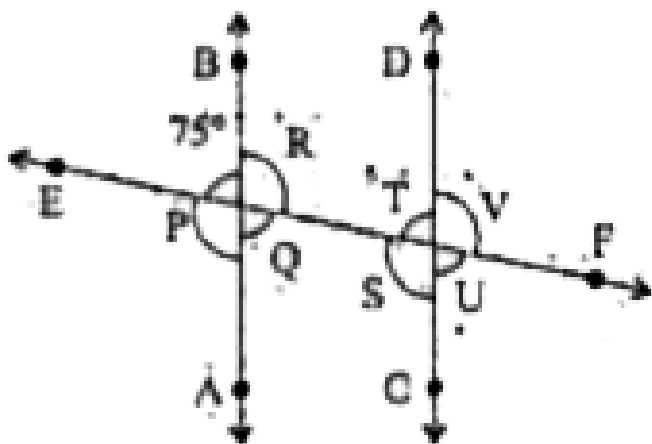
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16. In the given figures, the intersected line are parallel to each other. Find the unknown angles.



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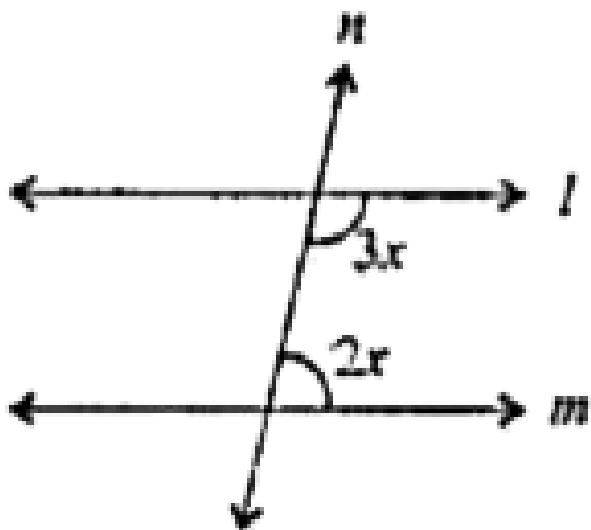
17. In the given figures, the intersected line are parallel to each other. Find the unknown angles.



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18. Find the value of x in the following figures

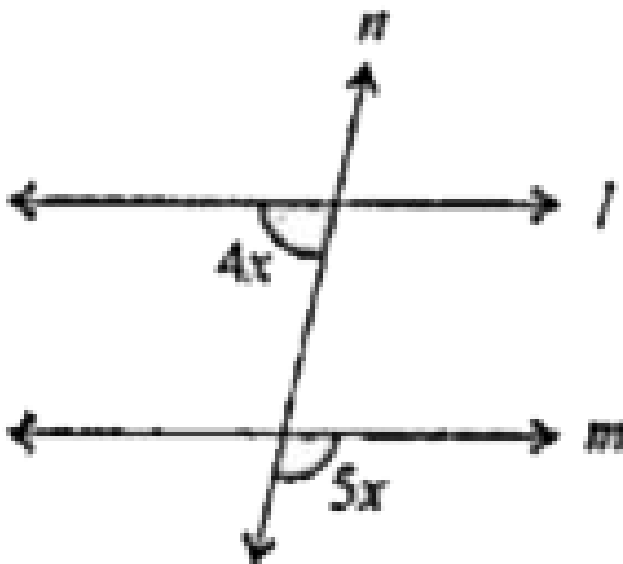
if $l \parallel m$



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19. Find the value of x in the following figures

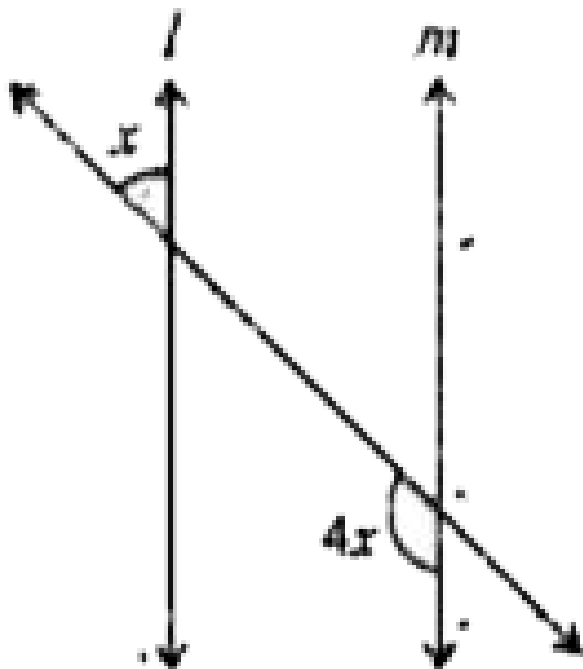
if $l \parallel m$



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20. Find the value of x in the following figures

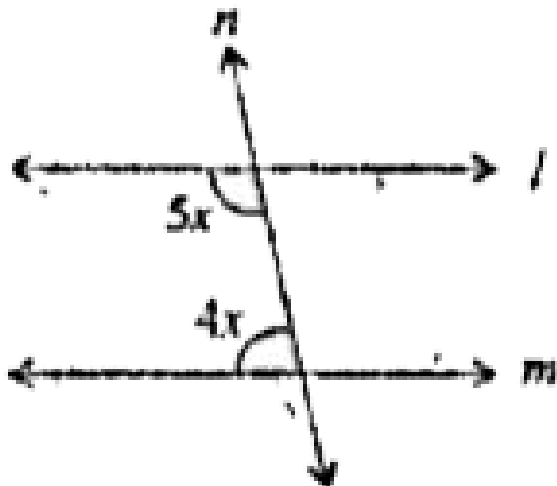
if $l \parallel m$



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21. Find the value of x in the following figures

if $l \parallel m$

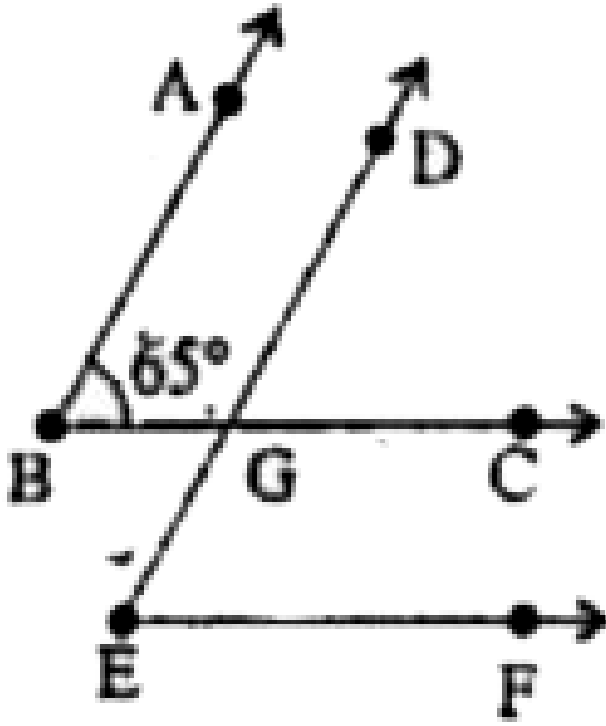


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22. In the given figures arms of two angles are parallel, find the following.

(i) $\angle DGC$

(ii) $\angle DEF$

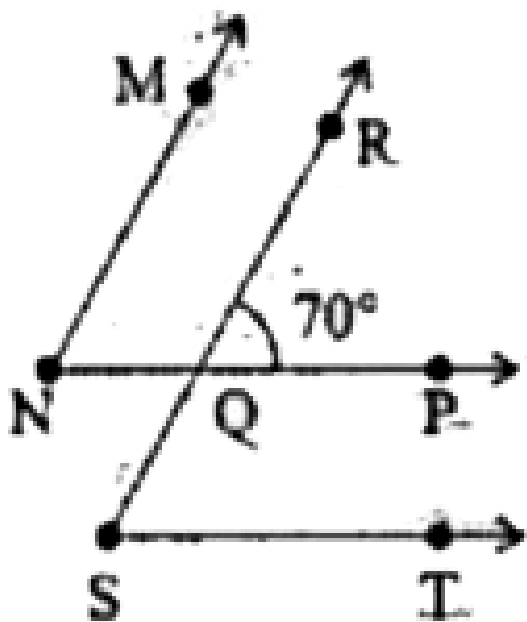


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23. In the given figures arms of two angles are parallel, find the following.

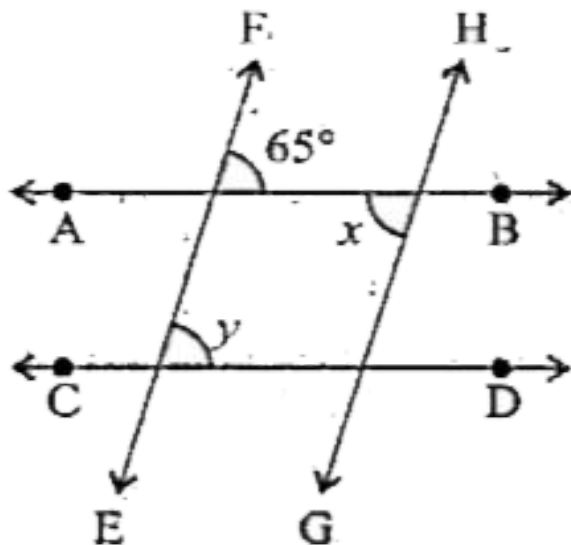
(i) $\angle MNP$

(ii) $\angle RST$



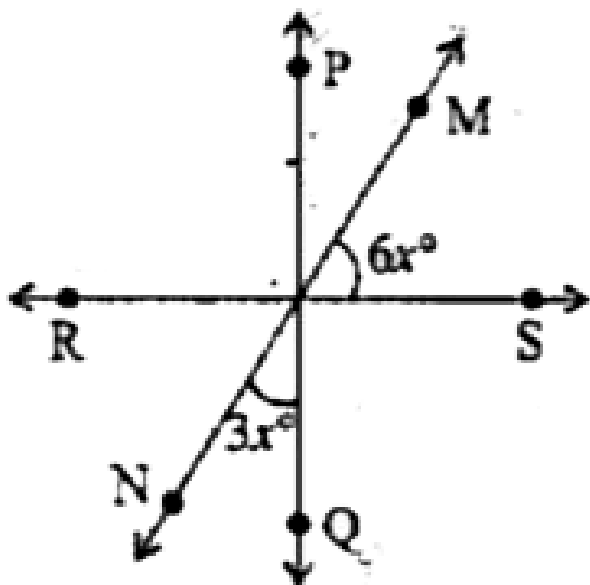
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24. In the following figure $AB \parallel CD$ and $EF \parallel GH$ find the measure of $\angle x$ and $\angle y$.



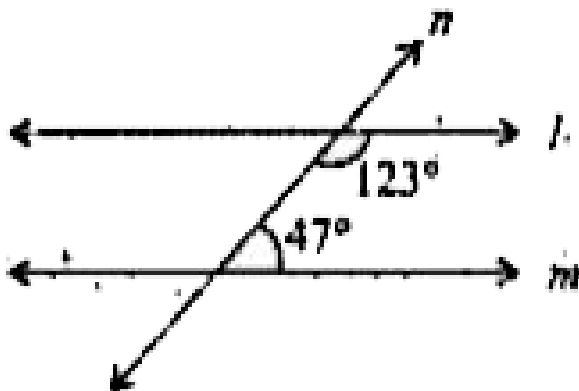
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25. $PQ \perp RS$, find the value of x in following figure.



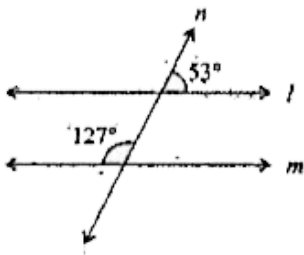
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26. In the given figure below, decide whether l is parallel to m .



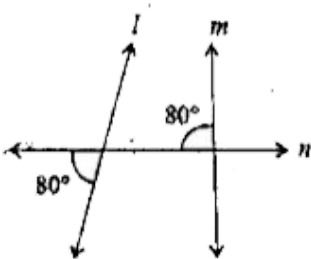
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27. In the given figure below, decide whether l is parallel to m .



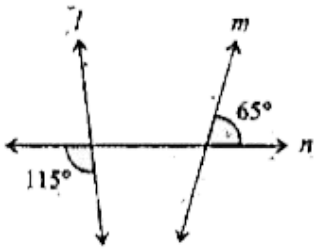
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28. In the given figure below, decide whether l is parallel to m .



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29. In the given figure below, decide whether l is parallel to m .



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30. A pair of complementary angles is

A. 130° , 50°

B. 35° , 55°

C. 25° , 75°

D. 27° , 53°

Answer: B



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31. A pair of supplementary angles is

A. 55° , 115°

B. 65° , 125°

C. 47° , 133°

D. 40° , 50°

Answer: C



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32. If one angle of a linear pair is acute then the other angle is

A. acute

B. obtuse

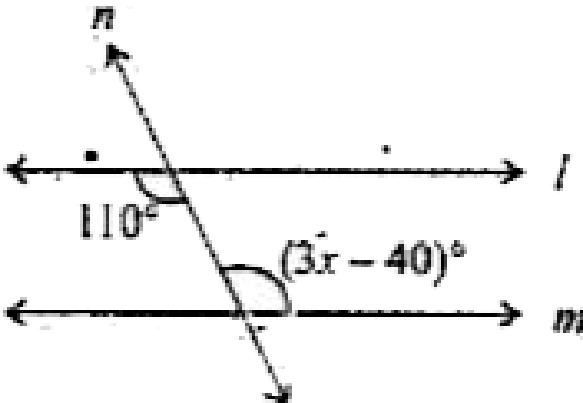
C. right

D. straight

Answer: B

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33. In the adjoining figure, if $l \parallel m$ then the value of x is



A. 50°

B. 60°

C. 70°

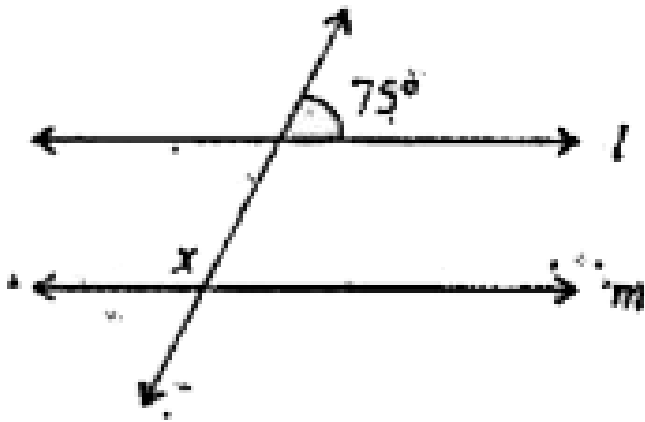
D. 45°

Answer: A



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34. In the adjoining figure, if $l \parallel m$, then



A. 75°

B. 95°

C. 105°

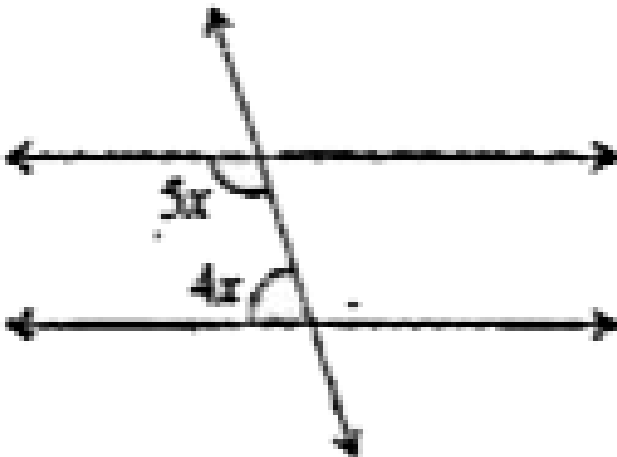
D. 115°

Answer: C



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35. In the adjoining figure, the value of x that will make the lines l and m parallel is



A. 20

B. 30

C. 60

D. 80

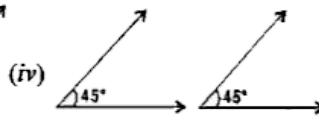
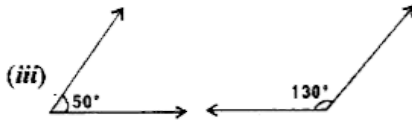
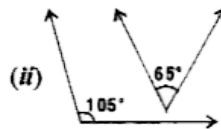
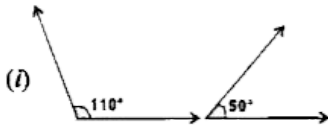
Answer: A



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Other Important Questions | Multiple Choice Question

1. Find the pair of supplementary angles :



A. I

B. II

C. III

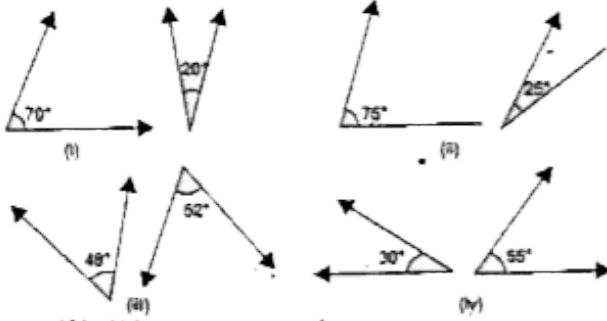
D. IV

Answer: C



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2. Find the pair of complementary angles :



A. (i)

B. (ii)

C. (iii)

D. (iv)

Answer: A



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3. Find the obtuse angle from the following :

A. 70°

B. 90°

C. 120°

D. 85°

Answer: C



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4. Find the acute angle from the following :

A. 95°

B. 75°

C. 100°

D. 90°

Answer: B



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5. Find right angle from the following :

A. 130°

B. 90°

C. 45°

D. 180°

Answer: B



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6. Complement of 41° will be :

A. 39°

B. 59°

C. 49°

D. 139°

Answer: C



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7. Supplement of 55° will be :

A. 135°

B. 125°

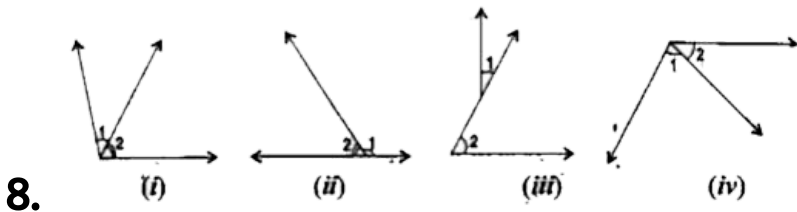
C. 35°

D. 45°

Answer: B



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In which fig $\angle 1$ and $\angle 2$ are not adjacent angles ?

- A. I
- B. II
- C. III
- D. IV

Answer: C

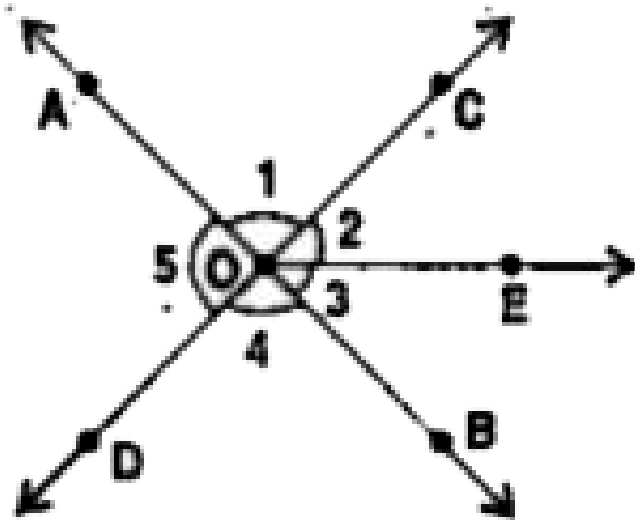
9. Which of the following statement is true ?

- A. Two acute angles can form a linear pair
- B. Two obtuse angles can form a linear pair
- C. An acute angle and a right angle can form a linear pair
- D. Two right angles can form a linear pair

Answer: D



10. Which statement is not true ?



A. $\angle 1$ and $\angle 2$ are adjacent angles.

B. $\angle AOC$ is adjacent to $\angle AOE$

C. $\angle COE$ and $\angle EOD$ form a linear pair .

D. $\angle BOD$ and $\angle DOA$ are supplementary angles.

Answer: B



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11. If a transversal intersects three lines than number of intersecting points will be :

A. 1

B. 2

C. 3

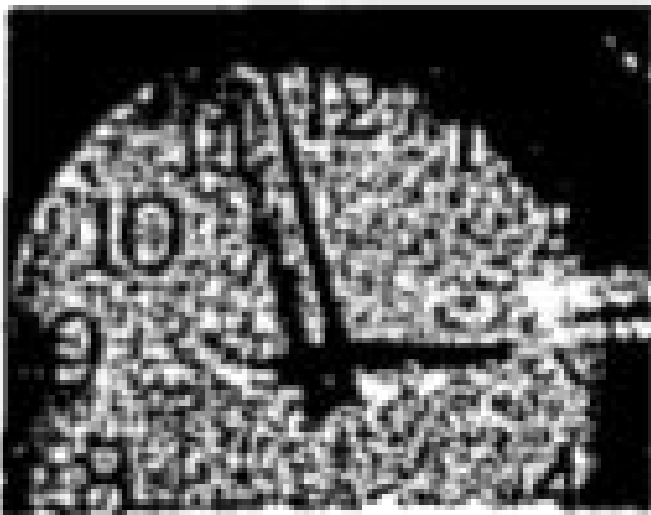
D. 4

Answer: C



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12. In given figure which type of angle is formed between the needles of the clock.



- A. Right angle
- B. Obtuse angle
- C. Acute angle
- D. Straight angles

Answer: B





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13. What is supplementary angle of 0° .

A. 0°

B. 90°

C. 180°

D. None of these

Answer: C



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14. Vertically opposite angles are

A. Always equal

B. Sometimes equal

C. Are not equal

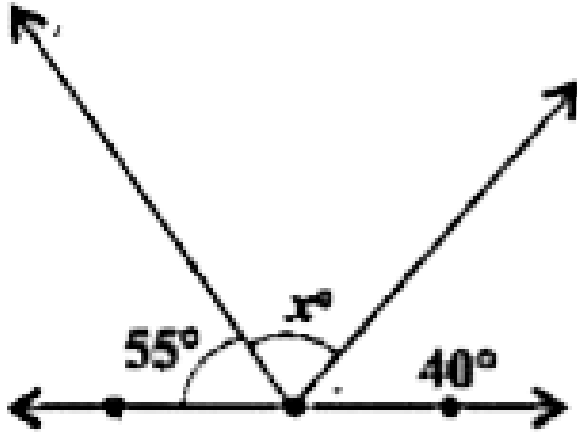
D. none of these

Answer: A



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15.



The value of x will be :

A. 105°

B. 75°

C. 85°

D. 95°

Answer: C



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16. If two parallel lines are cut by a transversal then number of pairs of alternate interior angles will be :

A. 1

B. 2

C. 3

D. 4

Answer: B



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17. If two parallel lines are cut by a transversal then number of pairs of corresponding angles will be :

A. 1

B. 2

C. 3

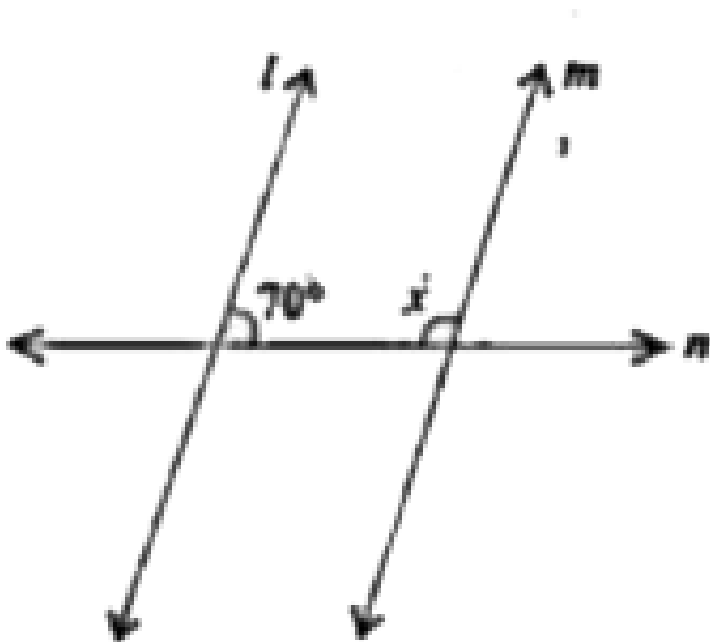
D. 4

Answer: D



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18. $l \parallel m$ and n is a transversal the value of x will be



A. 70°

B. 120°

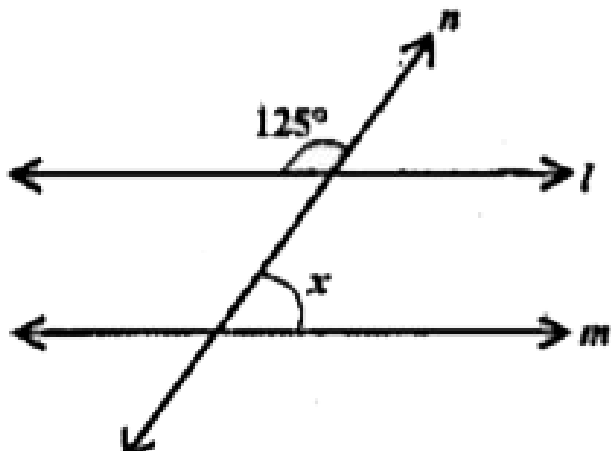
C. 110°

D. 130°

Answer: C



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19.

$l \parallel m$ and transversal n intersects them
thus value of x will be

A. 125°

B. 55°

C. 65°

D. 75°

Answer: B



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Other Important Questions li Fill In The Blanks

1. A is a part of a line that has one end points.



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2. An angle whose measure is 90° is called a ..

.....



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3. An angle whose measure lies between 180° and 360° is called a angle.



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4. Sum of measures of two supplementary angles is



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5. The angles in a linear pair are



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6. Two lines are said to be perpendicular to each other if they intersect at a



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7. A line which intersects two or more lines in a plane is called a



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8. The sum of all the angles at a point is
.....



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Other Important Questions iii State Whether The Following Statements Are True Or False

1. Sum of the measures of two complementary angles is 180°



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2. A pair of angles which lie on the opposite side of the point of intersections are called vertically opposite angles.



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3. Two intersecting lines can intersect each other at more than one point.



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4. Two lines in the same plane are parallel if they are at an equal distance and never meet.



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5. Vertically opposite angles are not always equal.



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6. Sum of the interior angles on the same side of a transversal is 360°



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7. If two parallel lines are cut by a transversal then corresponding angles are equal.



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8. If two parallel line are cut by a transversal then alternate exterior angles are not equal.



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