

NISCORT FATHER AGNEL SCHOOL, VAISHALI (2017-18)
SELF LEARNING WORKSHEET-11
CLASS-V
TOPIC - GEOMETRY

1. Fill in the blanks:

- (a) A _____ determines a location.
- (b) A _____ corresponds to the shortest distance between two points.
- (c) A _____ is obtained when a line segment is extended on both sides indefinitely.
- (d) _____ line(s) can be drawn through two given different points.
- (e) Any two different lines in a plane are either _____ or _____.
- (f) Two distinct lines meeting at a point are called _____ lines.
- (g) Line p parallel to line q is written as _____.
- (h) Three or more points are said to be _____ if all of them lie on the same line.
- (i) If three given points do not lie on the same line they are said to be _____.
- (j) A _____ is a portion of line starting at a point and going in one direction endlessly.

2. Classify the angles whose measure are given below as acute, right, obtuse, straight or complete:

- (a) 133° (b) 17° (c) 182° (d) 90° (e) 180° (g) 360°

3. Give the complement of each of the following:

- (a) 75° (b) 86° (c) 40° (d) 64°

4. Give the supplement of each of the following:

- (a) 55° (b) 76° (c) 120° (d) 134°

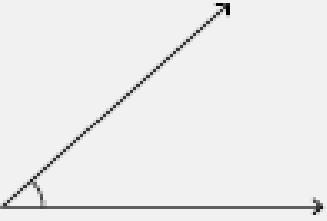
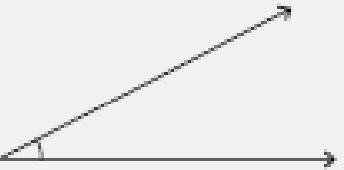
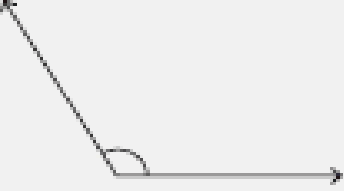
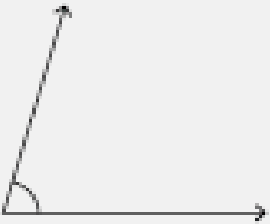

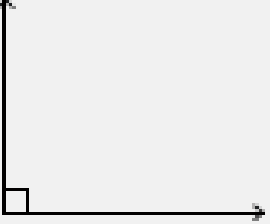
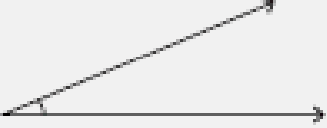
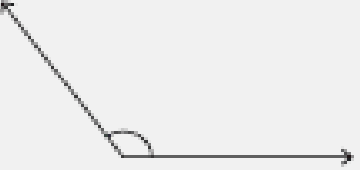
5. Which of the following pairs are complementary / supplementary?

- (a) 75° and 105° (b) 55° and 35° (c) 110° and 70° (d) 26° and 64°

6. Identify the following as point, ray, line or line segment.



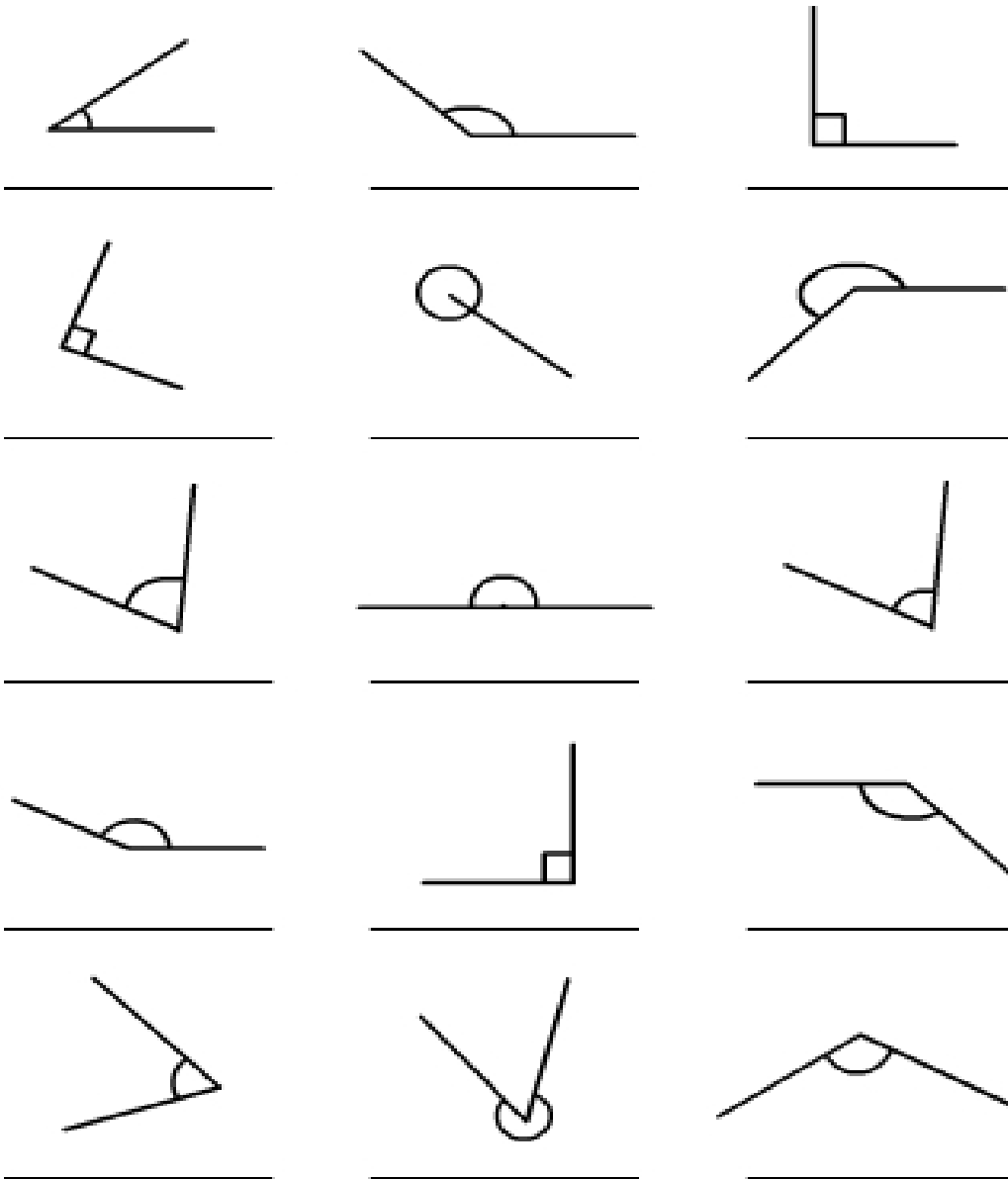
7. Measure each angle using protractor:

<p>1)</p>  <p>Angle : _____</p>	<p>2)</p>  <p>Angle : _____</p>
<p>3)</p>  <p>Angle : _____</p>	<p>4)</p>  <p>Angle : _____</p>
<p>5)</p>  <p>Angle : _____</p>	<p>6)</p>  <p>Angle : _____</p>
<p>7)</p>  <p>Angle : _____</p>	<p>8)</p>  <p>Angle : _____</p>

8. Fill in the blanks:

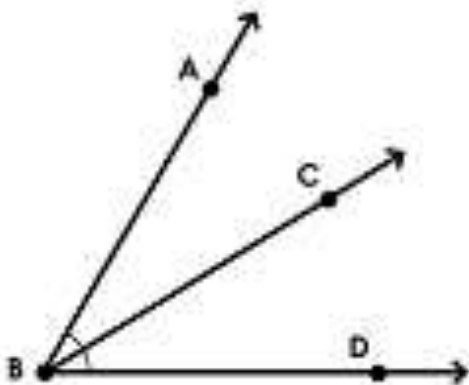
- (a) Measure of an acute angle is between _____ and _____.
- (b) Measure of a right angle is equal to _____.
- (c) An acute angle is always _____ than a right angle.
- (d) Measure of an obtuse angle is between _____ and _____.
- (e) An acute angle is always _____ than an obtuse angle.
- (f) A right angle is always _____ than an obtuse angle.
- (g) If two angles have same measure they are said to be _____.

9. Identify the type of angle as acute, obtuse, right, straight, complete or reflex.

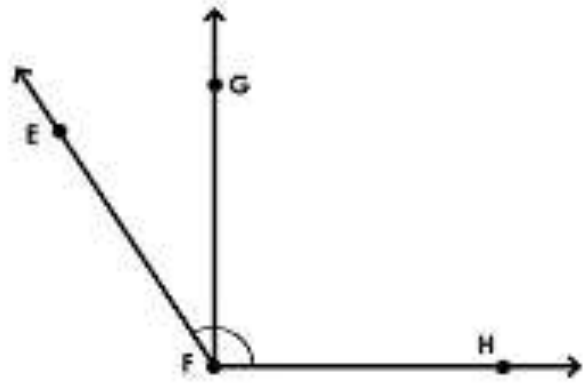


10. Name the pair of adjacent angles in the following figures:

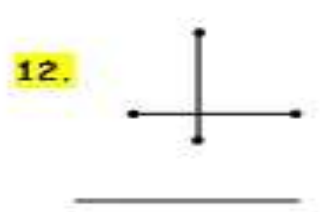
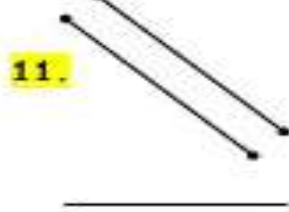
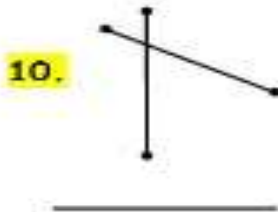
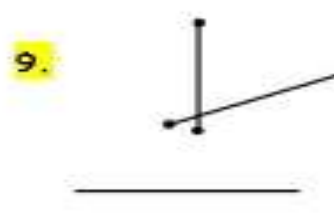
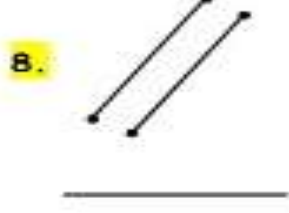
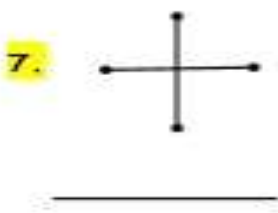
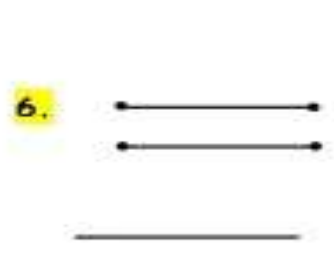
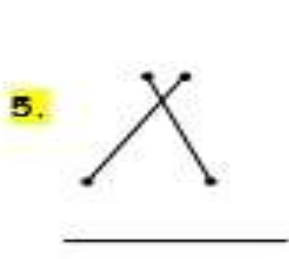
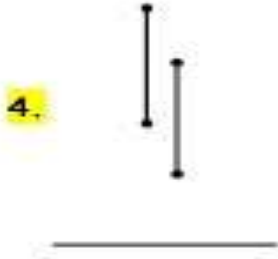
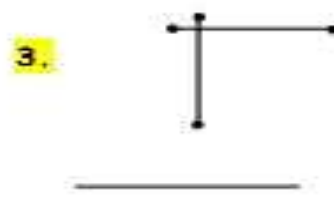
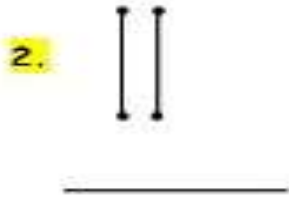
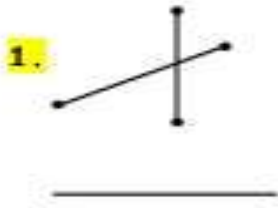
(a)



(b)



11. Identify the pair of lines as parallel, intersecting or perpendicular:



12. Classify the following pair of angles as complementary, supplementary or neither of two:

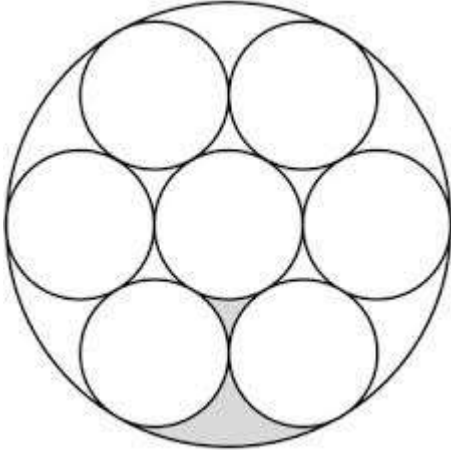
- (a) 35 and 55
- (b) 67 and 89
- (c) 108 and 72
- (d) 34 and 56
- (e) 88 and 100
- (f) 125 and 55
- (g) 105 and 75
- (h) 63 and 27
- (i) 96 and 57
- (j) 90 and 90

Answer:

1. (a) point (b) line segment (c) ray (d) one (e) parallel, intersecting
(f) intersecting (g) pIlq (h) collinear (i) non-collinear (j) ray
2. (a) Obtuse (b) Acute (c) Reflex (d) Right (e) Straight (f) Complete
3. (a) 15° (b) 4° (c) 50° (d) 26°
4. (a) 125° (b) 104° (c) 60° (d) 46°
5. (a) Supplementary (b) Complementary (c) Supplementary (d) Complementary
6. (a) line (b) point (c) line segment (d) ray
8. (a) 0° , 90° (b) 90° (c) less (d) 90° , 180° (e) less (f) less (g) congruent
10. (a) $\angle ABC$, $\angle CBD$ (b) $\angle EFG$, $\angle GFH$
12. Complementary – (a), (d), (h) Supplementary – (c), (f), (g), (j) None of these – (b), (e), (i)

NISCORT FATHER AGNEL SCHOOL, VAISHALI (2017-18)
SELF LEARNING WORKSHEET-12
CLASS-V
TOPIC – CIRCLE, PATTERNS AND SYMMETRY

1. How many circles are there in the figure below:

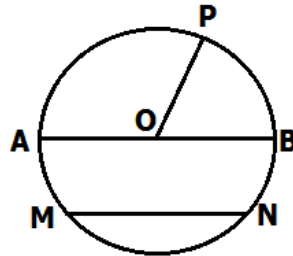


2. Fill in the blanks:

- (a) A _____ of a circle is a line segment joining any two points on the circle.
- (b) The diameter of a circle divides it into two _____.
- (c) A _____ is a chord passing through the center of the circle.
- (d) Circumference means the length of the _____ of the circle.
- (e) A _____ is the path of a point moving at the same distance from a fixed point.
- (f) If radius of a circle is 12 cm, length of its longest chord is _____ cm.
- (g) If diameter of a circle is 18 cm, its radius is _____ cm.

3. In this given figure, name of the parts of the circle.

- (a) Centre _____
- (b) Diameter _____
- (c) Chord _____
- (d) Radius other than OA and OB _____



4. Calculate the diameter of each circle whose radii are given below.

- (a) 8 cm
- (b) 16.50 cm
- (c) 8.4 cm

5. Calculate the radius of each circle whose diameter is given below.

- (a) 14.6 cm
- (b) 24.4 cm
- (c) 30.2 cm

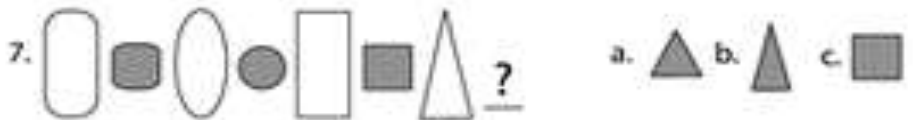
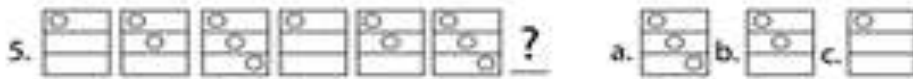
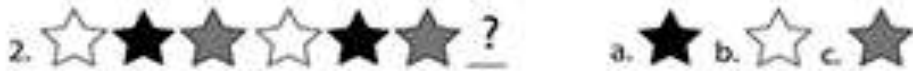
6. Identify the following numbers as square numbers, triangular numbers, none or both.

78, 36, 67, 21, 81, 99, 15, 16, 43

7. Write and draw using dots;

- (a) 4th triangular number
- (b) 2nd triangular number
- (c) 2nd square number
- (d) 3rd square number

8. Circle the shape that comes next in the sequence.



9. Observe the following patterns and write the next two numbers:

- (a) $1 \times 1 = 1 = 1$
 $2 \times 2 = 4 = 1 + 2 + 1$
 $3 \times 3 = 9 = 1 + 2 + 3 + 2 + 1$
 $4 \times 4 = 16 = 1 + 2 + 3 + 4 + 3 + 2 + 1$
 $5 \times 5 = 25 = \underline{\hspace{2cm}}$
 $6 \times 6 = 36 = \underline{\hspace{2cm}}$

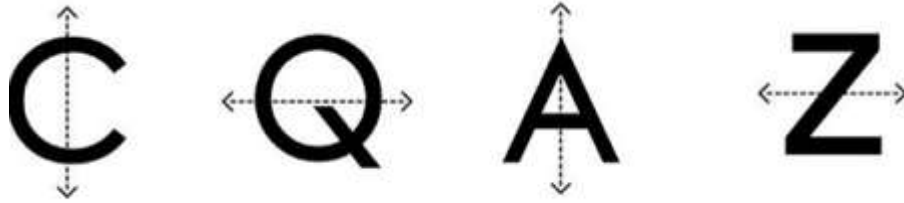
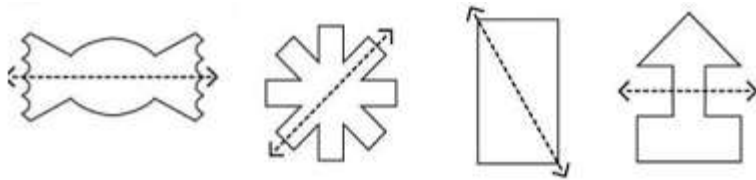
- (b) $1 + 3 = 4 = 2 \times 2$
 $1 + 3 + 5 = 9 = 3 \times 3$
 $1 + 3 + 5 + 7 = 16 = 4 \times 4$
 $1 + 3 + 5 + 7 + 9 = 25 = \underline{\hspace{2cm}}$
 $1 + 3 + 5 + 7 + 9 + 11 = \underline{\hspace{2cm}}$

10. Express the following square numbers as the sum of consecutive odd numbers.

- (a) 49 (b) 16 (c) 25

11. Write a square number that comes between 50 and 80 and express it in three different ways.

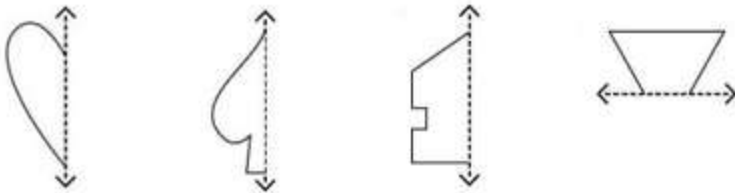
12. Tell whether the dotted line on each shape represents a line of symmetry. Write yes or no.



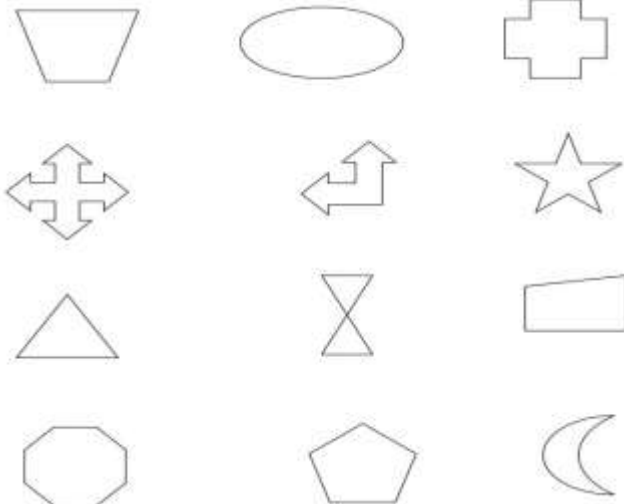
13. Draw a line of symmetry on each shape.



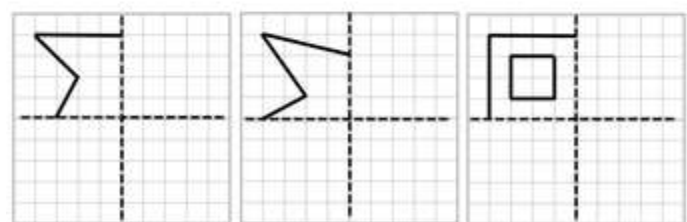
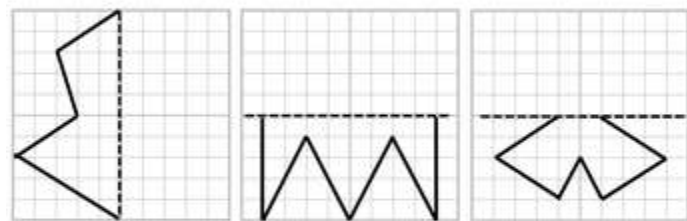
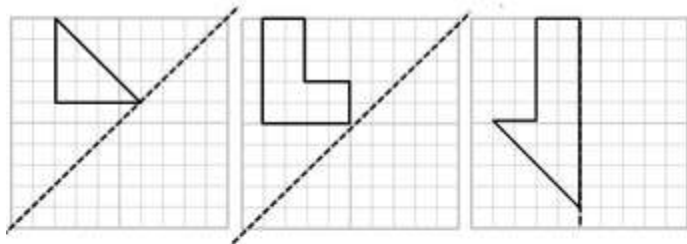
14. Draw the second half of each symmetrical shape.



15. Which of the following figures have rotational symmetry?



16. Draw the mirror images of the following figures.



ANSWERS:

1. 8
2. (a) chord (b) parts (c) diameter (d) boundary (e) radius (f) 24cm (g) 9cm
3. (a) O (b) AB (c) MN (d) OP
4. (a) 16 cm (b) 33 cm (c) 16.8 cm
5. (a) 7.3 cm (b) 12.2 cm (c) 15.1 cm
6. Square numbers – 36, 81, 16
Triangular numbers – 15, 21, 36, 78
None – 67, 99, 43
Both – 36
7. (a) 10 (b) 3 (c) 4 (d) 9
10. (a) $49 = 1+3+5+7+9+11+13$ (b) $16=1+3+5+7$ (c) $25=1+3+5+7+9$
11. $64=1+3+5+7+9+11+13+15$
 $64=8 \times 8$
 $64=1+2+3+4+5+6+7+8+7+6+5+4+3+2+1$