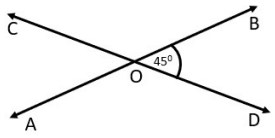
Lines & Angles Worksheet – 3

1. In the below diagram two straight lines AB and CD intersect at a point O. If ∠BOD = 45°, then find the measure of each other angles.



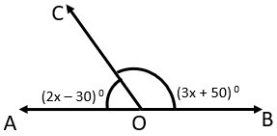
a) ∠BOC = 125°, ∠AOC = 45°, ∠AOD = 135°

b) ∠BOC = 135°, ∠AOC = 45°, ∠AOD = 135°

c) ∠BOC = 125°, ∠AOC = 55°, ∠AOD = 135°

d) ∠BOC = 135°, ∠AOC = 55°, ∠AOD = 135°

2. Find the value of 'x' in the below given diagram.



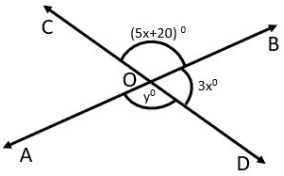
a) 16 °

b) 24 °

c) 32 °

d) 48 °

3. AB and CD are two straight lines intersecting on point O as shown in the below diagram. Find the value of x + y.



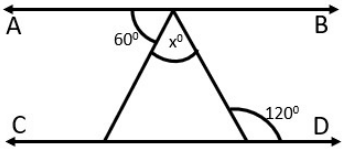
a) 160°

b) 240°

c) 140°

d) 480°

4. Find the value of 'x' in the below given diagram.



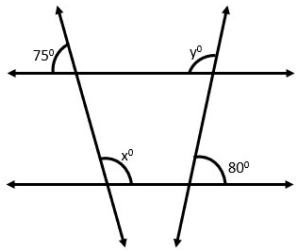
a) 40°

b) 24°

c) 32°

d) 60°

5. Find the value of ‘x’ and ‘y’ in the below given diagram.



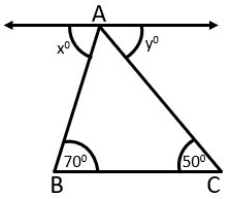
a) x = 105°, y = 110°

b) x = 105°, y = 100°

c) x = 105°, y = 105°

d) x = 100°, y = 100°

6. In the below given diagram ∠B = 70°, ∠C = 50° and BC || PAQ. Find the value of ‘x’ and ‘y’.



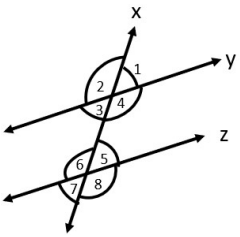
a) x = 70°, y = 50°

b) x = 50°, y = 70°

c) x = 60°, y = 70°

d) x = 75°, y = 45°

7. In the below given diagram, lines y and z are parallel to each other. If ∠1 and ∠2 are in the ratio 5 : 7, then find the measures of all the angles.



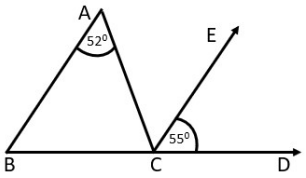
a) ∠1 = 75°, ∠2 = 100^0, ∠3 = 80°, ∠4 = 100°, ∠5 = 75°, ∠6 = 100°, ∠7 = 80°, ∠8 = 100°

b) ∠1 = 75°, ∠2 = 105°, ∠3 = 75°, ∠4 = 105°, ∠5 = 75°, ∠6 = 105°, ∠7 = 75°, ∠8 = 105°

c) ∠1 = 105°, ∠2 = 75°, ∠3 = 105°, ∠4 = 75°, ∠5 = 105°, ∠6 = 75°, ∠7 = 105°, ∠8 = 75°

d) ∠1 = 80°, ∠2 = 100^0, ∠3 = 80°, ∠4 = 100^0, ∠5 = 80°, ∠6 = 100^0, ∠7 = 80°, ∠8 = 100^0

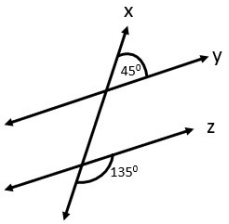
8. In the below diagram AB || CE, ∠BAC = 52° and ∠ECD = 55°. Find the value of ∠ACB.



a) 52^o b) 45^o

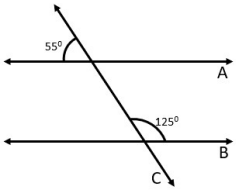
c) 62^o d) 73^o

9. In the below given diagram Y and Z are two parallel lines. Mark True / False.



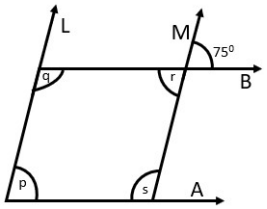
a) True b) False

10. In the below given diagram A and B are two parallel lines. Mark True / False.



a) True b) False

11. In the below given diagram L ||M and A || B. Find the value of p, q, r and s.



a) $p = 75^o$, $q = 105^o$, $r = 75^o$, $s = 100^o$

b) $p = 65^o$, $q = 105^o$, $r = 65^o$, $s = 105^o$

c) $p = 75^o$, $q = 105^o$, $r = 75^o$, $s = 105^o$

d) $p = 80^o$, $q = 100^o$, $r = 80^o$, $s = 100^o$

12. Pair of vertically opposite angles are always supplementary. Mark True / False.

a) True b) False

13. Two adjacent angles always form a linear pair. Mark True / False.

a) True b) False

14. If two lines are cut by a transversal, then each pair of corresponding angles are not equal. Mark True / False.

a) True b) False

15. Corresponding angles are opposite side of the transversal. Mark True / False.

a) True b) False

16. Alternate interior angles are on the same side of the transversal. Mark True / False.

a) True b) False

17. If two adjacent angles are supplementary, then they form a linear pair. Mark True / False.

a) True b) False

18. Two lines in a plain which never meet are known as _____.

a) Transversal b) Linear

c) Parallel d) Adjacent

19. If a transversal cuts two parallel lines, then each pair of corresponding angles are equal. Mark True / False.

a) True b) False

20. If a transversal cuts two parallel lines, then each pair of co-interior angles are not supplementary. Mark True / False.

a) True b) False