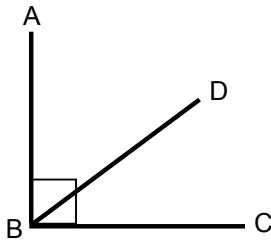


# ANGLES – DBC

Find the value of each angle indicated below.

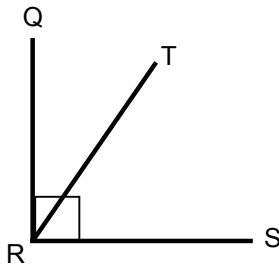
page 1

1.  $\angle DBC = 30^\circ$   
Find  $\angle ABD$ .



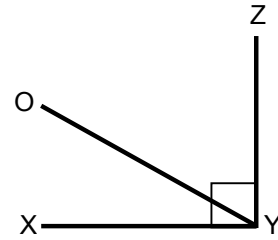
- ① ② ③ ④ ⑤  
(1)  $40^\circ$   
(2)  $50^\circ$   
(3)  $60^\circ$   
(4)  $90^\circ$   
(5)  $180^\circ$

2.  $\angle QRT = 40^\circ$   
Find  $\angle TRS$ .



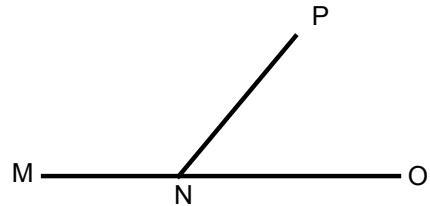
- ① ② ③ ④ ⑤  
(1)  $30^\circ$   
(2)  $40^\circ$   
(3)  $50^\circ$   
(4)  $90^\circ$   
(5)  $110^\circ$

3.  $\angle ZYO = 58^\circ$   
Find  $\angle XYO$ .



- ① ② ③ ④ ⑤  
(1)  $29^\circ$   
(2)  $31^\circ$   
(3)  $32^\circ$   
(4)  $42^\circ$   
(5)  $60^\circ$

4.  $\angle PNO = 50^\circ$   
Find  $\angle MNP$ .



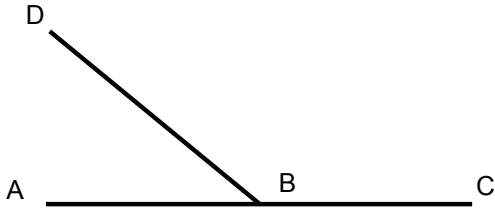
- ① ② ③ ④ ⑤  
(1)  $20^\circ$   
(2)  $40^\circ$   
(3)  $130^\circ$   
(4)  $140^\circ$   
(5)  $150^\circ$

# ANGLES – DBC

Find the value of each angle indicated below.

page 2

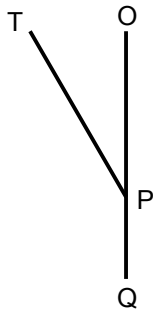
5.  $\angle ABD = 37^\circ$   
Find  $\angle CBD$ .



① ② ③ ④ ⑤

- (1)  $30^\circ$
- (2)  $43^\circ$
- (3)  $143^\circ$
- (4)  $153^\circ$
- (5)  $163^\circ$

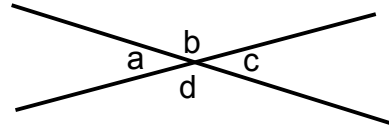
6.  $\angle QPT = 140^\circ$   
Find  $\angle OPT$ .



① ② ③ ④ ⑤

- (1)  $29^\circ$
- (2)  $40^\circ$
- (3)  $140^\circ$
- (4)  $160^\circ$
- (5)  $180^\circ$

Questions 7 and 8 refer to the following diagram.  $\angle a = 47^\circ$ .



7. Find the value of angle b.

① ② ③ ④ ⑤

- (1)  $47^\circ$
- (2)  $37^\circ$
- (3)  $123^\circ$
- (4)  $133^\circ$
- (5)  $163^\circ$

8. Find the value of  $(\angle a + \angle c)$ .

① ② ③ ④ ⑤

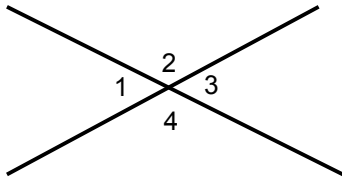
- (1)  $33^\circ$
- (2)  $63^\circ$
- (3)  $74^\circ$
- (4)  $94^\circ$
- (5)  $133^\circ$

# ANGLES – DBC

Find the value of each angle indicated below.

page 3

Questions 9, 10, and 11 refer to the following diagram.  $\angle 1 = 30^\circ$



9. Find the value of  $\angle 2$ .

① ② ③ ④ ⑤

- (1)  $50^\circ$
- (2)  $75^\circ$
- (3)  $150^\circ$
- (4)  $175^\circ$
- (5)  $180^\circ$

10. Find the value of  $\angle 3$ .

① ② ③ ④ ⑤

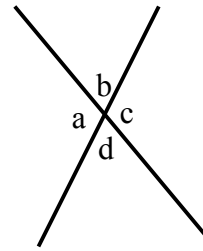
- (1)  $30^\circ$
- (2)  $50^\circ$
- (3)  $150^\circ$
- (4)  $175^\circ$
- (5)  $180^\circ$

11. Find the value of  $\angle 4$ .

① ② ③ ④ ⑤

- (1)  $25^\circ$
- (2)  $50^\circ$
- (3)  $75^\circ$
- (4)  $95^\circ$
- (5)  $150^\circ$

12.  $\angle d = 58^\circ$ .

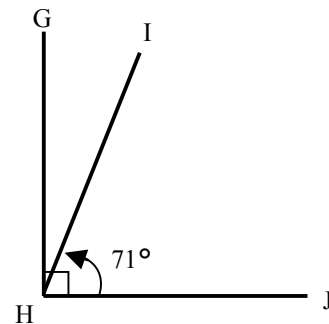


Find the value of angle b.

① ② ③ ④ ⑤

- (1)  $22^\circ$
- (2)  $58^\circ$
- (3)  $122^\circ$
- (4)  $155^\circ$
- (5)  $160^\circ$

13. Find the value of angle GHI.



① ② ③ ④ ⑤

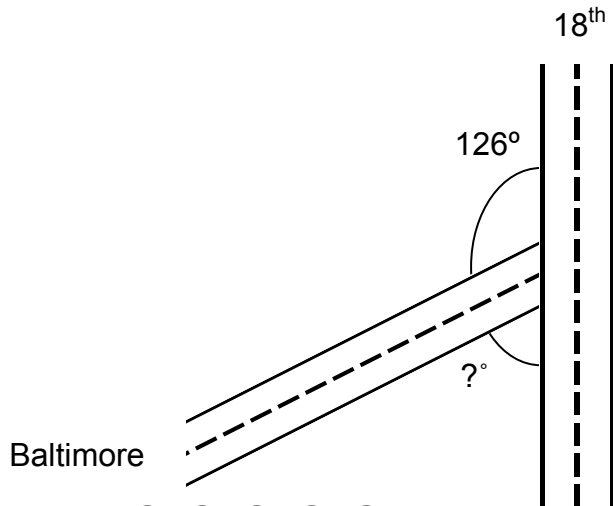
- (1)  $15^\circ$
- (2)  $19^\circ$
- (3)  $29^\circ$
- (4)  $49^\circ$
- (5)  $60^\circ$

# ANGLES – DBC

Find the value of each angle indicated below.

page 4

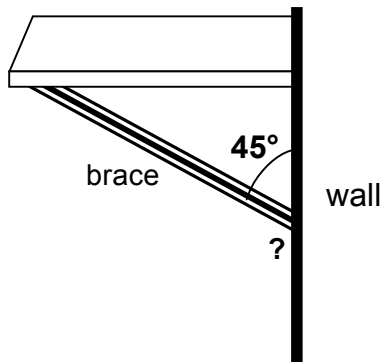
14. Baltimore intersects 18<sup>th</sup> Avenue at an angle of  $126^\circ$ . What is the value of the unknown angle at the intersection of Baltimore and 18<sup>th</sup> Avenue?



① ② ③ ④ ⑤

- (1)  $26^\circ$   
 (2)  $54^\circ$   
 (3)  $154^\circ$   
 (4)  $164^\circ$   
 (5)  $175^\circ$

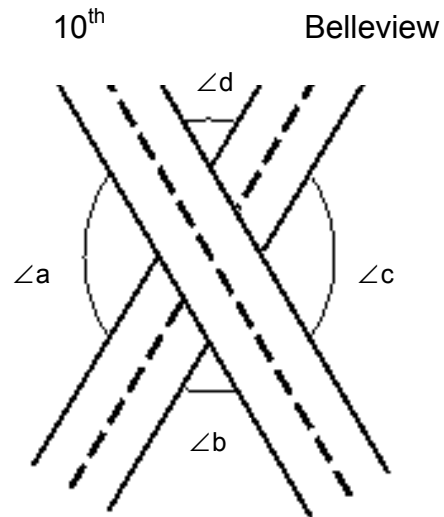
15. The brace forms a  $45^\circ$  angle with the wall. Find the angle that the brace makes with the rest of the wall.



① ② ③ ④ ⑤

- (1)  $125^\circ$   
 (2)  $135^\circ$   
 (3)  $145^\circ$   
 (4)  $155^\circ$   
 (5)  $165^\circ$

16. 10<sup>th</sup> Avenue intersects Bellevue. Angle d has a value of  $25^\circ$ . What is the value of angle a at this intersection?



① ② ③ ④ ⑤

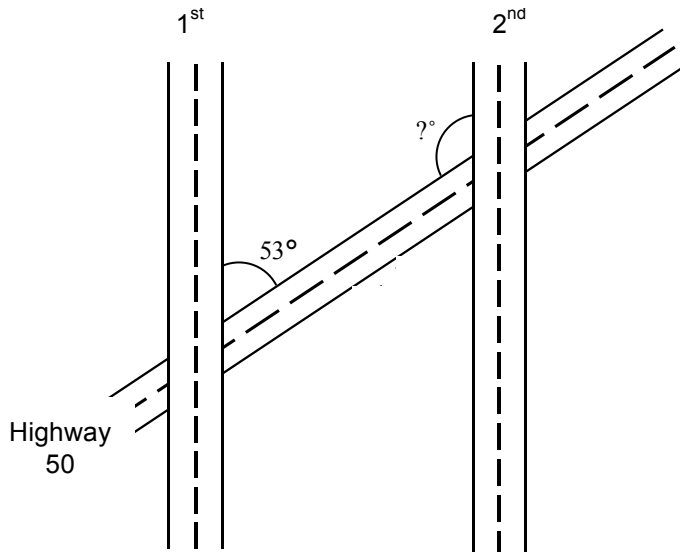
- (1)  $126^\circ$   
 (2)  $154^\circ$   
 (3)  $155^\circ$   
 (4)  $158^\circ$   
 (5)  $170^\circ$

# ANGLES – DBC

Find the value of each angle indicated below.

page 5

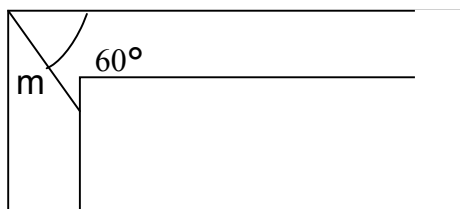
17. Highway 50 intersects 1<sup>st</sup> Street and 2<sup>nd</sup> Street. Find the value of the unknown angle at the intersection of 2<sup>nd</sup> Street and Highway 50.



① ② ③ ④ ⑤

- (1) 27°  
(2) 127°  
(3) 137°  
(4) 147°  
(5) 180°

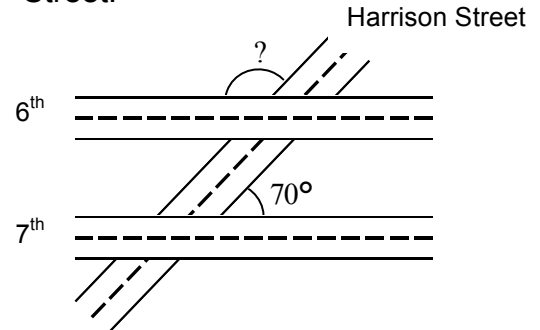
18. The corner of this picture frame has a 60° angle. What is the value of angle m?



① ② ③ ④ ⑤

- (1) 20°  
(2) 30°  
(3) 60°  
(4) 77°  
(5) 80°

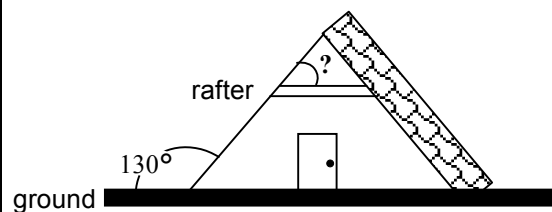
19. Harrison Street crosses 6<sup>th</sup> Street and 7<sup>th</sup> Street at an angle of 70°. Find the value of the unknown angle at the intersection of Harrison and 6<sup>th</sup> Street.



① ② ③ ④ ⑤

- (1) 20°  
(2) 100°  
(3) 110°  
(4) 120°  
(5) 130°

20. The side of Mark's A Frame house makes an angle of 130° with the ground. Find the value of the angle that the side of the house makes with the rafter.



① ② ③ ④ ⑤

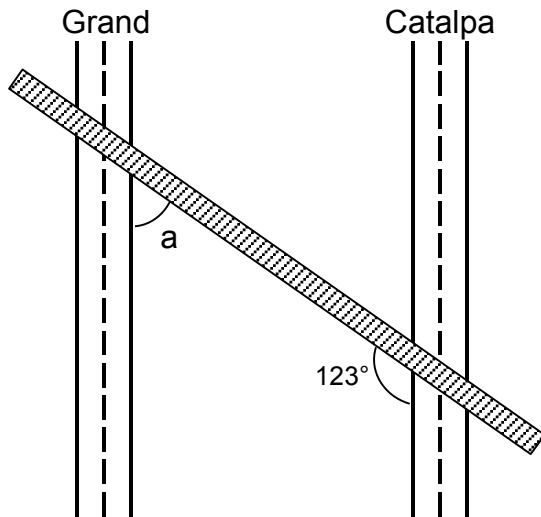
- (1) 40°  
(2) 50°  
(3) 69°  
(4) 97°  
(5) 112°

# ANGLES – DBC

Find the value of each angle indicated below.

page 6

21. The downtown light rail crosses Grand and Catalpa Avenues. What is the value of angle  $a$  in the drawing?



① ② ③ ④ ⑤

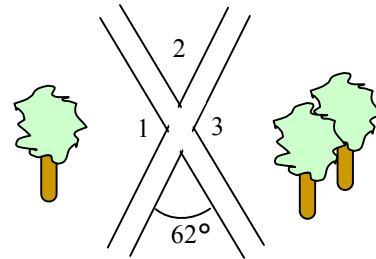
- (1)  $47^\circ$   
(2)  $57^\circ$   
(3)  $67^\circ$   
(4)  $77^\circ$   
(5)  $107^\circ$

22. A door next to a **corner** in the study is open at an  $80^\circ$  angle, almost touching the wall. Find the value of the angle that the open door makes with the wall.

① ② ③ ④ ⑤

- (1)  $10^\circ$   
(2)  $20^\circ$   
(3)  $40^\circ$   
(4)  $55^\circ$   
(5)  $75^\circ$

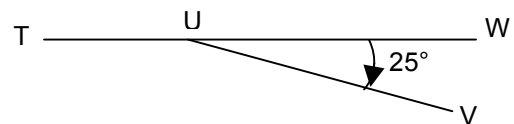
23. The two jogging paths in Liberty Park intersect. Find the value of angle 3.



① ② ③ ④ ⑤

- (1)  $110^\circ$   
(2)  $115^\circ$   
(3)  $118^\circ$   
(4)  $127^\circ$   
(5)  $143^\circ$

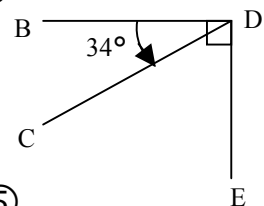
24. What is the value of angle TUV?



① ② ③ ④ ⑤

- (1)  $145^\circ$   
(2)  $155^\circ$   
(3)  $165^\circ$   
(4)  $180^\circ$   
(5)  $360^\circ$

25. What is the value of angle CDE?



① ② ③ ④ ⑤

- (1)  $35^\circ$   
(2)  $56^\circ$   
(3)  $66^\circ$   
(4)  $72^\circ$   
(5)  $102^\circ$