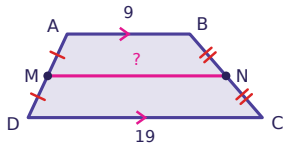
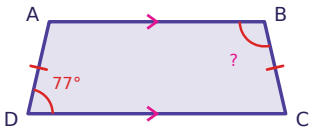
Trapezoids: Midsegments, Angles & Diagonals · 1

MN is the midsegment of trapezoid ABCD. AB = 9 and DC = 19. Find MN.



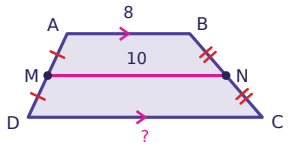
Trapezoids: Midsegments, Angles & Diagonals · 2

ABCD is an isosceles trapezoid with AD = BC. m∠D = 77°. Find m∠B.



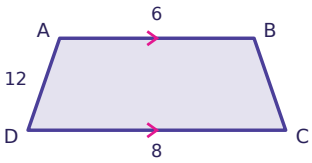
Trapezoids: Midsegments, Angles & Diagonals · 3

MN is the midsegment of trapezoid ABCD. MN = 10 and AB = 8. Find DC.



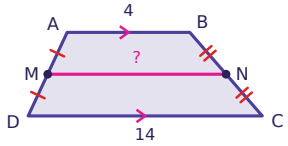
Trapezoids: Midsegments, Angles & Diagonals · 4

ABCD is an isosceles trapezoid with AD = BC. AB = 6, DC = 8 and AD = 12. Find the perimeter of ABCD.



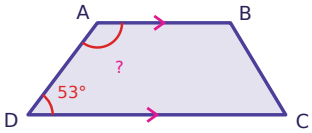
Trapezoids: Midsegments, Angles & Diagonals · 5

MN is the midsegment of trapezoid ABCD. AB = 4 and DC = 14. Find MN.



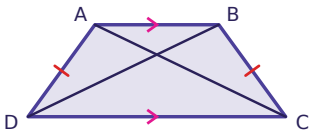
Trapezoids: Midsegments, Angles & Diagonals · 6

In trapezoid ABCD, AB ∥ DC. m∠D = 53°. Find m∠A.



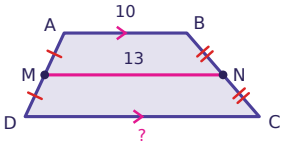
Trapezoids: Midsegments, Angles & Diagonals · 7

ABCD is an isosceles trapezoid with AD = BC. BD = 21. Find AC.



Trapezoids: Midsegments, Angles & Diagonals · 8

MN is the midsegment of trapezoid ABCD. MN = 13 and AB = 10. Find DC.



Trapezoids: Midsegments, Angles & Diagonals · 2

ANSWER

103°

Trapezoids: Midsegments, Angles & Diagonals · 1

ANSWER

14

Trapezoids: Midsegments, Angles & Diagonals · 4

ANSWER

38

Trapezoids: Midsegments, Angles & Diagonals · 3

ANSWER

12

Trapezoids: Midsegments, Angles & Diagonals · 6

ANSWER

127°

Trapezoids: Midsegments, Angles & Diagonals · 5

ANSWER

9

Trapezoids: Midsegments, Angles & Diagonals · 8

ANSWER

16

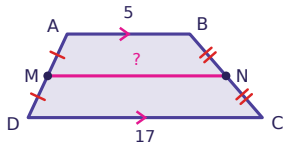
Trapezoids: Midsegments, Angles & Diagonals · 7

ANSWER

21

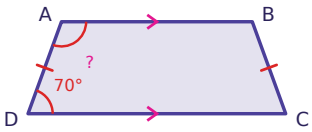
Trapezoids: Midsegments, Angles & Diagonals · 9

MN is the midsegment of trapezoid ABCD. AB = 5 and DC = 17. Find MN.



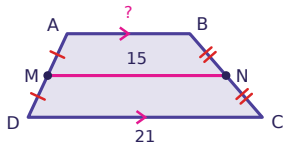
Trapezoids: Midsegments, Angles & Diagonals · 10

ABCD is an isosceles trapezoid with AD = BC. m∠D = 70°. Find m∠A.



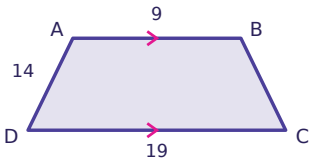
Trapezoids: Midsegments, Angles & Diagonals · 11

MN is the midsegment of trapezoid ABCD. MN = 15 and DC = 21. Find AB.



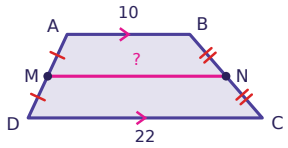
Trapezoids: Midsegments, Angles & Diagonals · 12

ABCD is an isosceles trapezoid with AD = BC. AB = 9, DC = 19 and AD = 14. Find the perimeter of ABCD.



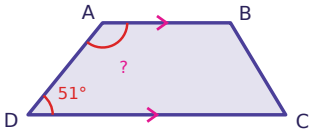
Trapezoids: Midsegments, Angles & Diagonals · 13

MN is the midsegment of trapezoid ABCD. AB = 10 and DC = 22. Find MN.



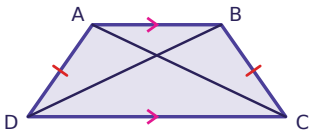
Trapezoids: Midsegments, Angles & Diagonals · 14

In trapezoid ABCD, AB ∥ DC. m∠D = 51°. Find m∠A.



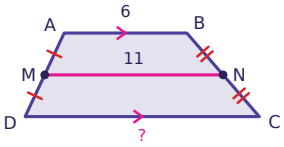
Trapezoids: Midsegments, Angles & Diagonals · 15

ABCD is an isosceles trapezoid with AD = BC. BD = 8. Find AC.



Trapezoids: Midsegments, Angles & Diagonals · 16

MN is the midsegment of trapezoid ABCD. MN = 11 and AB = 6. Find DC.



Trapezoids: Midsegments, Angles & Diagonals · 10

ANSWER

110°

Trapezoids: Midsegments, Angles & Diagonals · 9

ANSWER

11

Trapezoids: Midsegments, Angles & Diagonals · 12

ANSWER

56

Trapezoids: Midsegments, Angles & Diagonals · 11

ANSWER

9

Trapezoids: Midsegments, Angles & Diagonals · 14

ANSWER

129°

Trapezoids: Midsegments, Angles & Diagonals · 13

ANSWER

16

Trapezoids: Midsegments, Angles & Diagonals · 16

ANSWER

16

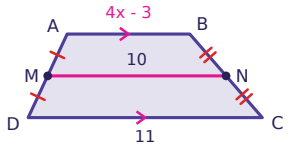
Trapezoids: Midsegments, Angles & Diagonals · 15

ANSWER

8

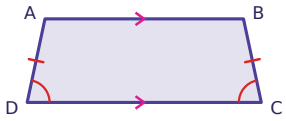
Trapezoids: Midsegments, Angles & Diagonals · 17

MN is the midsegment of trapezoid ABCD. AB = 4x - 3, DC = 11 and MN = 10. Find x.



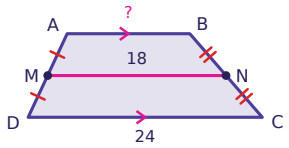
Trapezoids: Midsegments, Angles & Diagonals · 18

ABCD is an isosceles trapezoid with AD = BC. m∠D = (5x + 43)° and m∠C = (7x + 29)°. Find x.



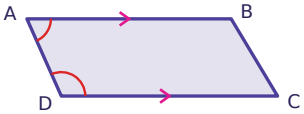
Trapezoids: Midsegments, Angles & Diagonals · 19

MN is the midsegment of trapezoid ABCD. MN = 18 and DC = 24. Find AB.



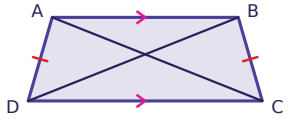
Trapezoids: Midsegments, Angles & Diagonals · 20

In trapezoid ABCD, AB ∥ DC. m∠D = (12x + 90)° and m∠A = (13x + 40)°. Find x.



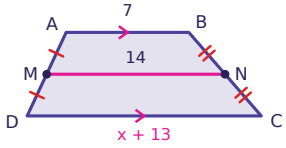
Trapezoids: Midsegments, Angles & Diagonals · 21

ABCD is an isosceles trapezoid with AD = BC. AC = 4x + 25 and BD = 2x + 33. Find x.



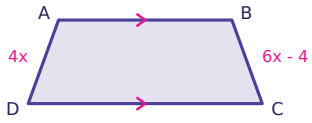
Trapezoids: Midsegments, Angles & Diagonals · 22

MN is the midsegment of trapezoid ABCD. AB = 7, DC = x + 13 and MN = 14. Find x.



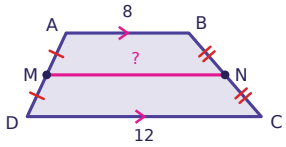
Trapezoids: Midsegments, Angles & Diagonals · 23

ABCD is an isosceles trapezoid with AD = BC. AD = 4x and BC = 6x - 4. Find x.



Trapezoids: Midsegments, Angles & Diagonals · 24

MN is the midsegment of trapezoid ABCD. AB = 8 and DC = 12. Find MN.



Trapezoids: Midsegments, Angles & Diagonals · 18

ANSWER

7

Trapezoids: Midsegments, Angles & Diagonals · 17

ANSWER

3

Trapezoids: Midsegments, Angles & Diagonals · 20

ANSWER

2

Trapezoids: Midsegments, Angles & Diagonals · 19

ANSWER

12

Trapezoids: Midsegments, Angles & Diagonals · 22

ANSWER

8

Trapezoids: Midsegments, Angles & Diagonals · 21

ANSWER

4

Trapezoids: Midsegments, Angles & Diagonals · 24

ANSWER

10

Trapezoids: Midsegments, Angles & Diagonals · 23

ANSWER

2