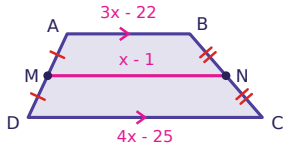
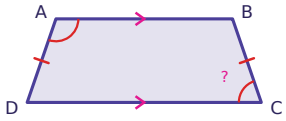
Trapezoids: Midsegments, Angles & Diagonals · 1

MN is the midsegment of trapezoid ABCD. AB = 3x - 22, DC = 4x - 25 and MN = x - 1. Find MN.



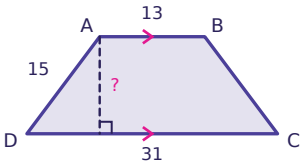
Trapezoids: Midsegments, Angles & Diagonals · 2

ABCD is an isosceles trapezoid with AD = BC. m∠A = (8x + 85)° and m∠C = (6x + 53)°. Find m∠C.



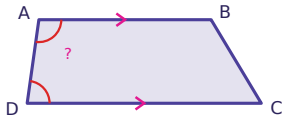
Trapezoids: Midsegments, Angles & Diagonals · 3

ABCD is an isosceles trapezoid with AD = BC. AB = 13 and DC = 31. AD = 15. Find the height of the trapezoid.



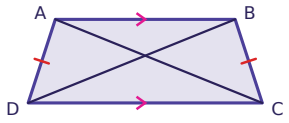
Trapezoids: Midsegments, Angles & Diagonals · 4

In trapezoid ABCD, AB ∥ DC. m∠D = (5x + 37)° and m∠A = (7x + 35)°. Find m∠A.



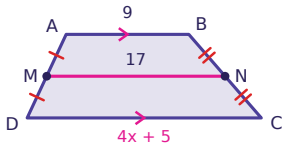
Trapezoids: Midsegments, Angles & Diagonals · 5

ABCD is an isosceles trapezoid with AD = BC. AC = 5x - 23 and BD = x + 25. Find AC.



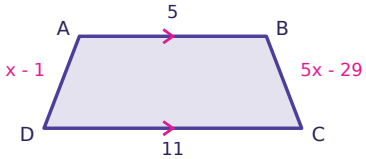
Trapezoids: Midsegments, Angles & Diagonals · 6

MN is the midsegment of trapezoid ABCD. AB = 9, DC = 4x + 5 and MN = 17. Find x.



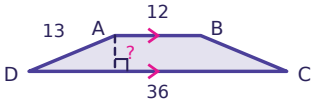
Trapezoids: Midsegments, Angles & Diagonals · 7

ABCD is an isosceles trapezoid with AD = BC. AD = x - 1, BC = 5x - 29, AB = 5 and DC = 11. Find the perimeter of ABCD.



Trapezoids: Midsegments, Angles & Diagonals · 8

ABCD is an isosceles trapezoid with AD = BC. AB = 12 and DC = 36. AD = 13. Find the height of the trapezoid.



Trapezoids: Midsegments, Angles & Diagonals · 2

ANSWER

71°

Trapezoids: Midsegments, Angles & Diagonals · 1

ANSWER

8

Trapezoids: Midsegments, Angles & Diagonals · 4

ANSWER

98°

Trapezoids: Midsegments, Angles & Diagonals · 3

ANSWER

12

Trapezoids: Midsegments, Angles & Diagonals · 6

ANSWER

5

Trapezoids: Midsegments, Angles & Diagonals · 5

ANSWER

37

Trapezoids: Midsegments, Angles & Diagonals · 8

ANSWER

5

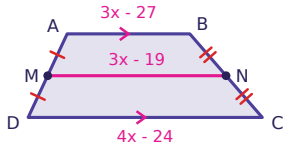
Trapezoids: Midsegments, Angles & Diagonals · 7

ANSWER

28

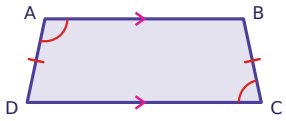
Trapezoids: Midsegments, Angles & Diagonals · 9

MN is the midsegment of trapezoid ABCD. AB = 3x - 27, DC = 4x - 24 and MN = 3x - 19. Find DC.



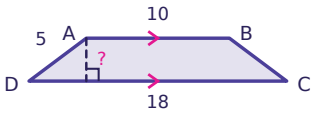
Trapezoids: Midsegments, Angles & Diagonals · 10

ABCD is an isosceles trapezoid with AD = BC. m∠A = (5x + 37)° and m∠C = (7x - 13)°. Find x.



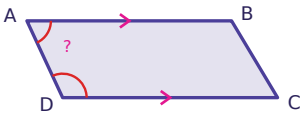
Trapezoids: Midsegments, Angles & Diagonals · 11

ABCD is an isosceles trapezoid with AD = BC. AB = 10 and DC = 18. AD = 5. Find the height of the trapezoid.



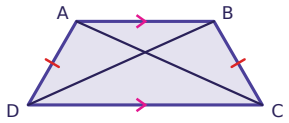
Trapezoids: Midsegments, Angles & Diagonals · 12

In trapezoid ABCD, AB ∥ DC. m∠D = (13x + 50)° and m∠A = (5x + 40)°. Find m∠A.



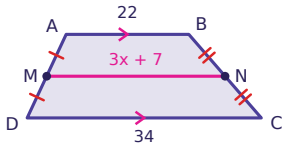
Trapezoids: Midsegments, Angles & Diagonals · 13

ABCD is an isosceles trapezoid with AD = BC. AC = x + 21 and BD = 3x + 1. Find AC.



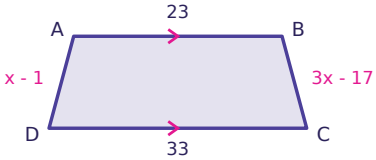
Trapezoids: Midsegments, Angles & Diagonals · 14

MN is the midsegment of trapezoid ABCD. AB = 22, DC = 34 and MN = 3x + 7. Find x.



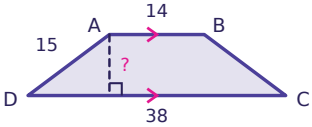
Trapezoids: Midsegments, Angles & Diagonals · 15

ABCD is an isosceles trapezoid with AD = BC. AD = x - 1, BC = 3x - 17, AB = 23 and DC = 33. Find the perimeter of ABCD.



Trapezoids: Midsegments, Angles & Diagonals · 16

ABCD is an isosceles trapezoid with AD = BC. AB = 14 and DC = 38. AD = 15. Find the height of the trapezoid.



Trapezoids: Midsegments, Angles & Diagonals · 10

ANSWER

13

Trapezoids: Midsegments, Angles & Diagonals · 9

ANSWER

28

Trapezoids: Midsegments, Angles & Diagonals · 12

ANSWER

65°

Trapezoids: Midsegments, Angles & Diagonals · 11

ANSWER

3

Trapezoids: Midsegments, Angles & Diagonals · 14

ANSWER

7

Trapezoids: Midsegments, Angles & Diagonals · 13

ANSWER

31

Trapezoids: Midsegments, Angles & Diagonals · 16

ANSWER

9

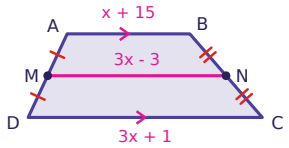
Trapezoids: Midsegments, Angles & Diagonals · 15

ANSWER

70

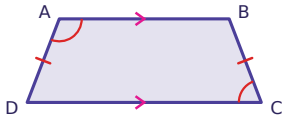
Trapezoids: Midsegments, Angles & Diagonals · 17

MN is the midsegment of trapezoid ABCD. AB = x + 15, DC = 3x + 1 and MN = 3x - 3. Find MN.



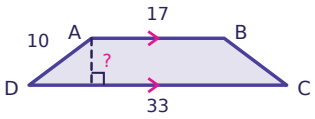
Trapezoids: Midsegments, Angles & Diagonals · 18

ABCD is an isosceles trapezoid with AD = BC. m∠A = (12x + 87)° and m∠C = (x + 67)°. Find x.



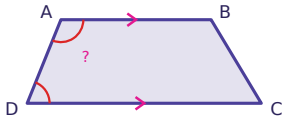
Trapezoids: Midsegments, Angles & Diagonals · 19

ABCD is an isosceles trapezoid with AD = BC. AB = 17 and DC = 33. AD = 10. Find the height of the trapezoid.



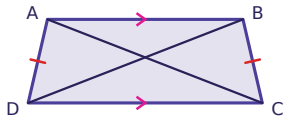
Trapezoids: Midsegments, Angles & Diagonals · 20

In trapezoid ABCD, AB ∥ DC. m∠D = (6x + 2)° and m∠A = (7x + 35)°. Find m∠A.



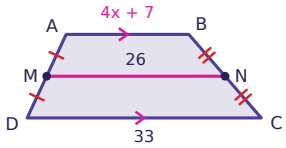
Trapezoids: Midsegments, Angles & Diagonals · 21

ABCD is an isosceles trapezoid with AD = BC. AC = 3x + 6 and BD = 4x + 3. Find AC.



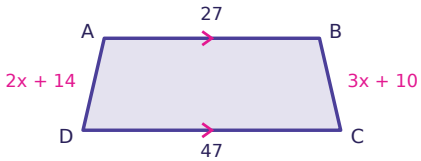
Trapezoids: Midsegments, Angles & Diagonals · 22

MN is the midsegment of trapezoid ABCD. AB = 4x + 7, DC = 33 and MN = 26. Find x.



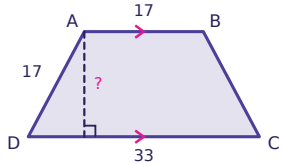
Trapezoids: Midsegments, Angles & Diagonals · 23

ABCD is an isosceles trapezoid with AD = BC. AD = 2x + 14, BC = 3x + 10, AB = 27 and DC = 47. Find the perimeter of ABCD.



Trapezoids: Midsegments, Angles & Diagonals · 24

ABCD is an isosceles trapezoid with AD = BC. AB = 17 and DC = 33. AD = 17. Find the height of the trapezoid.



Trapezoids: Midsegments, Angles & Diagonals · 18

ANSWER

2

Trapezoids: Midsegments, Angles & Diagonals · 17

ANSWER

30

Trapezoids: Midsegments, Angles & Diagonals · 20

ANSWER

112°

Trapezoids: Midsegments, Angles & Diagonals · 19

ANSWER

6

Trapezoids: Midsegments, Angles & Diagonals · 22

ANSWER

3

Trapezoids: Midsegments, Angles & Diagonals · 21

ANSWER

15

Trapezoids: Midsegments, Angles & Diagonals · 24

ANSWER

15

Trapezoids: Midsegments, Angles & Diagonals · 23

ANSWER

118