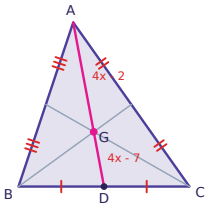
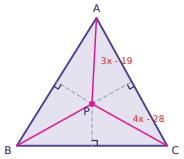
Centroid, Circumcenter & Incenter · 1

G is the centroid of △ABC. AG = 4x - 2 and GD = 4x - 7. Find x.



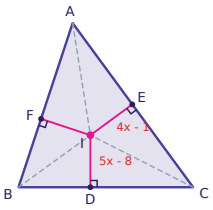
Centroid, Circumcenter & Incenter · 2

P is the circumcenter of △ABC. PA = 3x - 19 and PC = 4x - 28. Find PB.



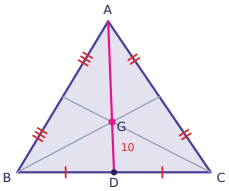
Centroid, Circumcenter & Incenter · 3

I is the incenter of △ABC. ID = 5x - 8 and IE = 4x - 1. Find IF.



Centroid, Circumcenter & Incenter · 4

G is the centroid of △ABC and GD = 10. Find AD.

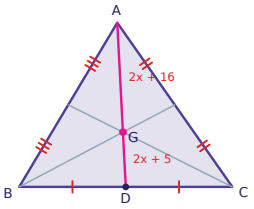


Centroid, Circumcenter & Incenter · 5

Which point of concurrency is the balance point (center of gravity) of a triangle: centroid, circumcenter, incenter, or orthocenter?

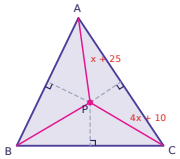
Centroid, Circumcenter & Incenter · 6

G is the centroid of △ABC. AG = 2x + 16 and GD = 2x + 5. Find x.



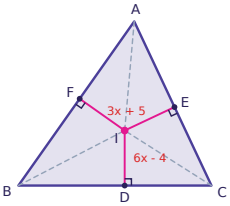
Centroid, Circumcenter & Incenter · 7

P is the circumcenter of △ABC. PA = x + 25 and PC = 4x + 10. Find PB.



Centroid, Circumcenter & Incenter · 8

I is the incenter of △ABC. ID = 6x - 4 and IE = 3x + 5. Find IF.



Centroid, Circumcenter & Incenter · 2

ANSWER

8

Centroid, Circumcenter & Incenter · 1

ANSWER

3

Centroid, Circumcenter & Incenter · 4

ANSWER

30

Centroid, Circumcenter & Incenter · 3

ANSWER

27

Centroid, Circumcenter & Incenter · 6

ANSWER

3

Centroid, Circumcenter & Incenter · 5

ANSWER

centroid

Centroid, Circumcenter & Incenter · 8

ANSWER

14

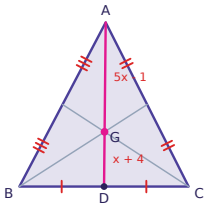
Centroid, Circumcenter & Incenter · 7

ANSWER

30

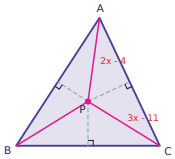
Centroid, Circumcenter & Incenter · 9

G is the centroid of △ABC. AG = 5x - 1 and GD = x + 4. Find x.



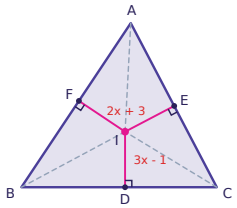
Centroid, Circumcenter & Incenter · 10

P is the circumcenter of △ABC. PA = 2x - 4 and PC = 3x - 11. Find PB.



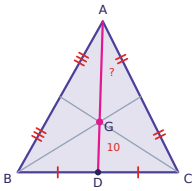
Centroid, Circumcenter & Incenter · 11

I is the incenter of △ABC. ID = 3x - 1 and IE = 2x + 3. Find IF.



Centroid, Circumcenter & Incenter · 12

G is the centroid of △ABC and GD = 10. Find AG.

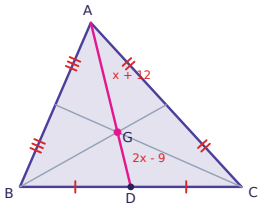


Centroid, Circumcenter & Incenter · 13

Which point of concurrency is the same distance from all three vertices of a triangle: centroid, circumcenter, incenter, or orthocenter?

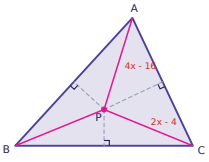
Centroid, Circumcenter & Incenter · 14

G is the centroid of △ABC. AG = x + 12 and GD = 2x - 9. Find x.



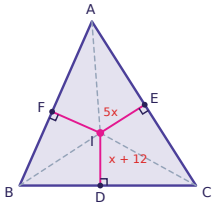
Centroid, Circumcenter & Incenter · 15

P is the circumcenter of △ABC. PA = 4x - 16 and PC = 2x - 4. Find x.



Centroid, Circumcenter & Incenter · 16

I is the incenter of △ABC. ID = x + 12 and IE = 5x. Find IF.



Centroid, Circumcenter & Incenter · 10

ANSWER

10

Centroid, Circumcenter & Incenter · 9

ANSWER

3

Centroid, Circumcenter & Incenter · 12

ANSWER

20

Centroid, Circumcenter & Incenter · 11

ANSWER

11

Centroid, Circumcenter & Incenter · 14

ANSWER

10

Centroid, Circumcenter & Incenter · 13

ANSWER

circumcenter

Centroid, Circumcenter & Incenter · 16

ANSWER

15

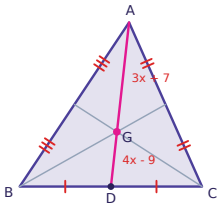
Centroid, Circumcenter & Incenter · 15

ANSWER

6

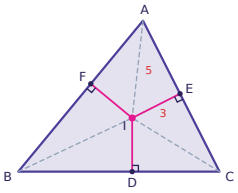
Centroid, Circumcenter & Incenter · 17

G is the centroid of △ABC. AG = 3x + 7 and GD = 4x - 9. Find x.



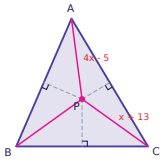
Centroid, Circumcenter & Incenter · 18

I is the incenter of △ABC. IE = 3 and IA = 5. Find AE.



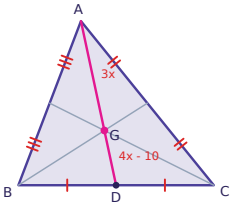
Centroid, Circumcenter & Incenter · 19

P is the circumcenter of △ABC. PA = 4x - 5 and PC = x + 13. Find PB.



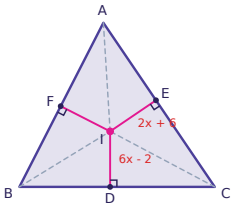
Centroid, Circumcenter & Incenter · 20

G is the centroid of △ABC. AG = 3x and GD = 4x - 10. Find AD.



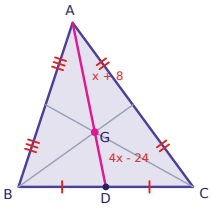
Centroid, Circumcenter & Incenter · 21

I is the incenter of △ABC. ID = 6x - 2 and IE = 2x + 6. Find IF.



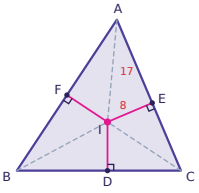
Centroid, Circumcenter & Incenter · 22

G is the centroid of △ABC. AG = x + 8 and GD = 4x - 24. Find x.



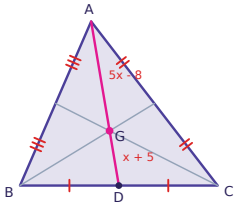
Centroid, Circumcenter & Incenter · 23

I is the incenter of △ABC. IE = 8 and IA = 17. Find AE.



Centroid, Circumcenter & Incenter · 24

G is the centroid of △ABC. AG = 5x - 8 and GD = x + 5. Find x.



Centroid, Circumcenter & Incenter · 18

ANSWER

4

Centroid, Circumcenter & Incenter · 17

ANSWER

5

Centroid, Circumcenter & Incenter · 20

ANSWER

18

Centroid, Circumcenter & Incenter · 19

ANSWER

19

Centroid, Circumcenter & Incenter · 22

ANSWER

8

Centroid, Circumcenter & Incenter · 21

ANSWER

10

Centroid, Circumcenter & Incenter · 24

ANSWER

6

Centroid, Circumcenter & Incenter · 23

ANSWER

15