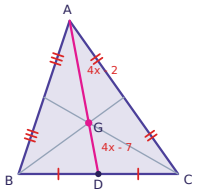
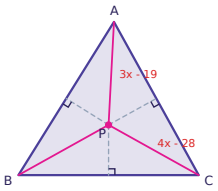
Task card 1 Centroid, Circumcenter & Incenter

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



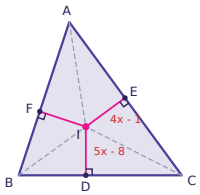
Task card 2 Centroid, Circumcenter & Incenter

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



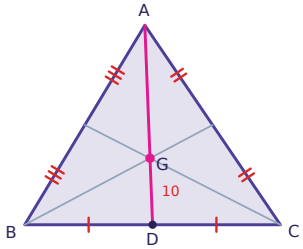
Task card 3 Centroid, Circumcenter & Incenter

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



Task card 4 Centroid, Circumcenter & Incenter

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

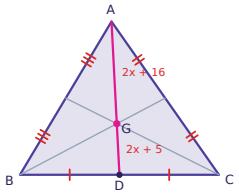


Task card 5 Centroid, Circumcenter & Incenter

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

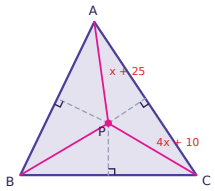
Task card 6 Centroid, Circumcenter & Incenter

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



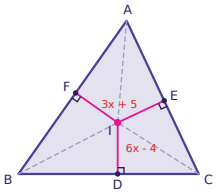
Task card 7 Centroid, Circumcenter & Incenter

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



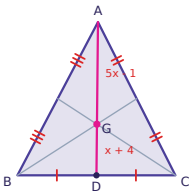
Task card 8 Centroid, Circumcenter & Incenter

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



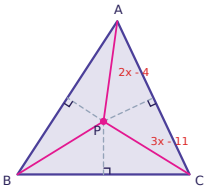
Task card 9 Centroid, Circumcenter & Incenter

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



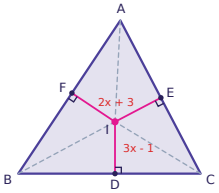
Task card 10 Centroid, Circumcenter & Incenter

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



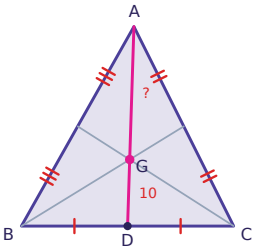
Task card 11 Centroid, Circumcenter & Incenter

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



Task card 12 Centroid, Circumcenter & Incenter

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

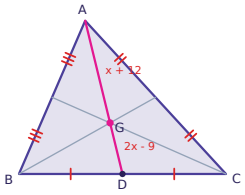


Task card 13 Centroid, Circumcenter & Incenter

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

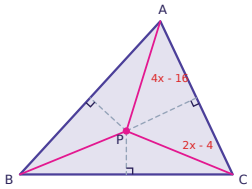
Task card 14 Centroid, Circumcenter & Incenter

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



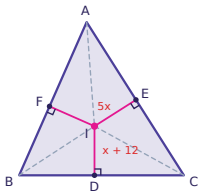
Task card 15 Centroid, Circumcenter & Incenter

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



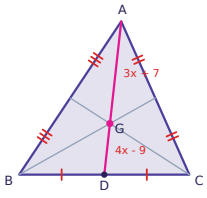
Task card 16 Centroid, Circumcenter & Incenter

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



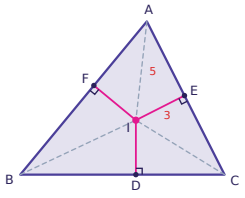
Task card 17 Centroid, Circumcenter & Incenter

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



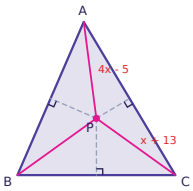
Task card 18 Centroid, Circumcenter & Incenter

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



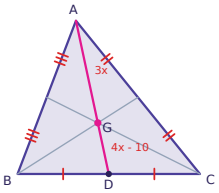
Task card 19 Centroid, Circumcenter & Incenter

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



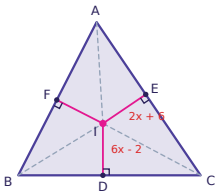
Task card 20 Centroid, Circumcenter & Incenter

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



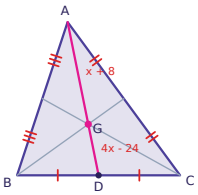
Task card 21 Centroid, Circumcenter & Incenter

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



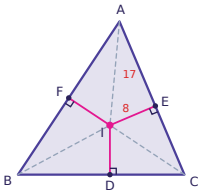
Task card 22 Centroid, Circumcenter & Incenter

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



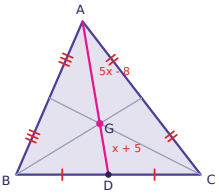
Task card 23 Centroid, Circumcenter & Incenter

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



Task card 24 Centroid, Circumcenter & Incenter

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



Centroid, Circumcenter & Incenter Task Cards

Recording sheet · Grade 10 · Use the property of the point of concurrency named in each problem.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Centroid, Circumcenter & Incenter Task Cards: Answer Key

Grade 10 · Medium

The answers online

1. 3	**2.** 8	**3.** 27
4. 30	**5.** centroid	**6.** 3
7. 30	**8.** 14	**9.** 3
10. 10	**11.** 11	**12.** 20
13. circumcenter	**14.** 10	**15.** 6
16. 15	**17.** 5	**18.** 4
19. 19	**20.** 18	**21.** 10
22. 8	**23.** 15	**24.** 6