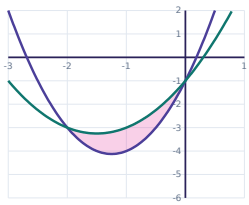
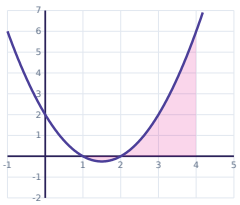
Task card 1 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 + 5x - 1$ and $y = x^2 + 3x - 1$.



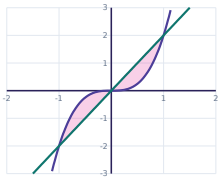
Task card 2 Area Under & Between Curves with I...

Find the total area between $y = x^2 - 3x + 2$ and the x-axis from $x = 1$ to $x = 4$.



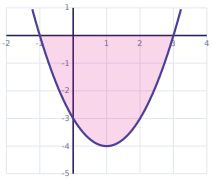
Task card 3 Area Under & Between Curves with I...

Find the total area of the region enclosed by $y = 2x^3$ and $y = 2x$.



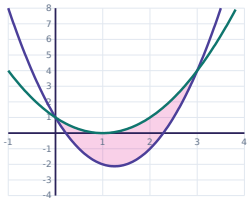
Task card 4 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - 2x - 3$ and the x-axis.



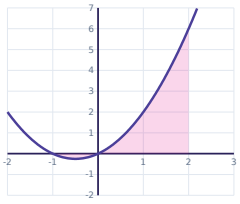
Task card 5 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 - 5x + 1$ and $y = x^2 - 2x + 1$.



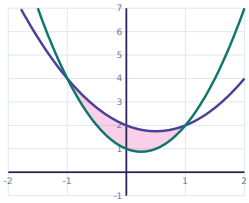
Task card 6 Area Under & Between Curves with I...

Find the total area between $y = x^2 + x$ and the x-axis from $x = -1$ to $x = 2$.



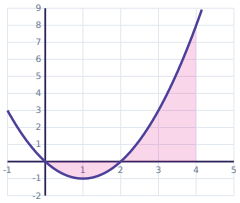
Task card 7 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - x + 2$ and $y = 2x^2 - x + 1$.



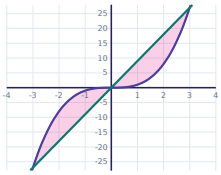
Task card 8 Area Under & Between Curves with I...

Find the total area between $y = x^2 - 2x$ and the x-axis from $x = 0$ to $x = 4$.



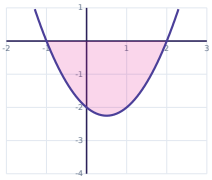
Task card 9 Area Under & Between Curves with I...

Find the total area of the region enclosed by $y = x^3$ and $y = 9x$.



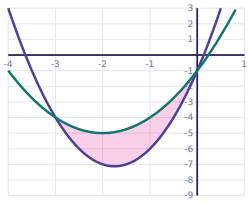
Task card 10 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - x - 2$ and the x-axis.



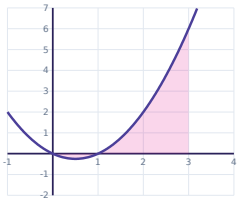
Task card 11 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 + 7x - 1$ and $y = x^2 + 4x - 1$.



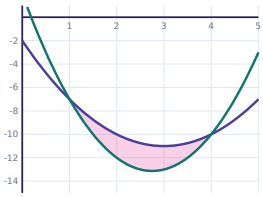
Task card 12 Area Under & Between Curves with I...

Find the total area between $y = x^2 - x$ and the x-axis from $x = 0$ to $x = 3$.



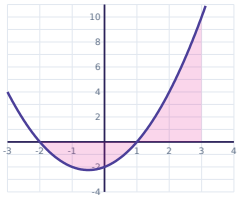
Task card 13 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - 6x - 2$ and $y = 2x^2 - 11x + 2$.



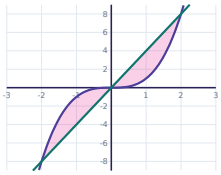
Task card 14 Area Under & Between Curves with I...

Find the total area between $y = x^2 + x - 2$ and the x-axis from $x = -2$ to $x = 3$.



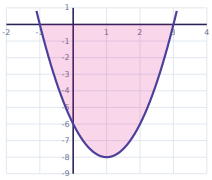
Task card 15 Area Under & Between Curves with I...

Find the total area of the region enclosed by $y = x^3$ and $y = 4x$.



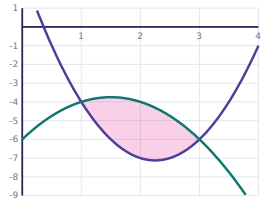
Task card 16 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 - 4x - 6$ and the x-axis.



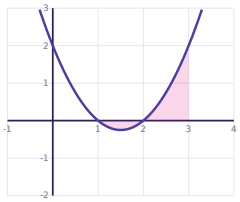
Task card 17 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = 2x^2 - 9x + 3$ and $y = -x^2 + 3x - 6$.



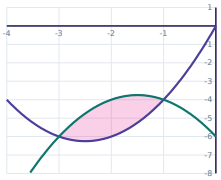
Task card 18 Area Under & Between Curves with I...

Find the total area between $y = x^2 - 3x + 2$ and the x-axis from $x = 1$ to $x = 3$.



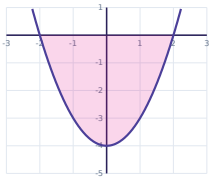
Task card 19 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 + 5x$ and $y = -x^2 - 3x - 6$.



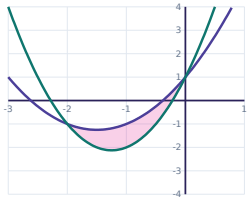
Task card 20 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - 4$ and the x-axis.



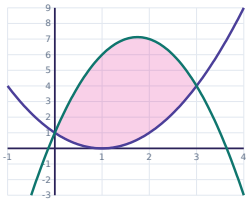
Task card 21 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 + 3x + 1$ and $y = 2x^2 + 5x + 1$.



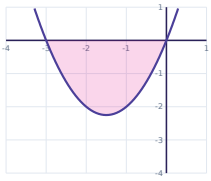
Task card 22 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 - 2x + 1$ and $y = -2x^2 + 7x + 1$.



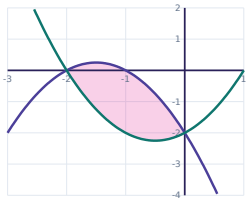
Task card 23 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = x^2 + 3x$ and the x-axis.



Task card 24 Area Under & Between Curves with I...

Find the area of the region enclosed by $y = -x^2 - 3x - 2$ and $y = x^2 + x - 2$.



Area Under & Between Curves with Integrals Task Cards

Recording sheet · Grade 12 · Find each area. Give an exact answer: a whole number or a fraction in simplest form. An area is never negative.

Scan to check your answers

Name: _____ Date: _____

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

Area Under & Between Curves with Integrals Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. $\frac{4}{3}$	**2.** $\frac{29}{6}$	**3.** 1
4. $\frac{32}{3}$	**5.** $\frac{9}{2}$	**6.** $\frac{29}{6}$
7. $\frac{4}{3}$	**8.** 8	**9.** $\frac{81}{2}$
10. $\frac{9}{2}$	**11.** $\frac{9}{2}$	**12.** $\frac{29}{6}$
13. $\frac{9}{2}$	**14.** $\frac{79}{6}$	**15.** 8
16. $\frac{64}{3}$	**17.** 4	**18.** 1
19. $\frac{8}{3}$	**20.** $\frac{32}{3}$	**21.** $\frac{4}{3}$
22. $\frac{27}{2}$	**23.** $\frac{9}{2}$	**24.** $\frac{8}{3}$