You can preview this quiz, but if this were a real attempt, you would be blocked because:

This quiz is not currently available

Question **1**

Not yet answered

Marked out of 6.00

Find the real solution of the following equation:

$$7x - 245 = 0$$

Answer: [   ]

Question **2**

Not yet answered

Marked out of 6.00

Find the real solutions of the following equation:

$$0 = 1 - \log_{14}(x^2 + 5)$$

(You can choose multiple answer options.)

- ☐ a. 3
- ☐ b. every real number is a solution of the equation
- ☐ c. there is no real solution
- ☐ d. 0
- ☐ e. every real number is a solution of the equation except the numbers violating the restrictions
- ☐ f. -3
- ☐ g. 5
- ☐ h. 14

Find the real solutions $(x_1 < x_2)$ of the following equation:

$7x^2 - 112x = -196$

First, type in the smaller of the solutions, x_1:

Answer:

Find the real solutions $(x_1 < x_2)$ of the following equation:

$7x^2 - 112x = -196$

Next, type in the larger of the solutions, x_2:

Answer:

Choose the corresponding power for each expression!

$\frac{1}{2}$	Choose...
6	Choose...
$2^2 \cdot 3^2$	Choose...
$\sqrt{2}$	Choose...
8	Choose...
1	Choose...
$\sqrt[3]{2^2}$	Choose...
$\frac{2^{-2}}{2^3}$	Choose...
$2^2 \cdot 2^3$	Choose...
$(2^2)^3$	Choose...
2	Choose...
4	Choose...

You have just made a bank deposit at 5% fixed annual interest for 4 years. The bank deposit is currently worth 1,000 euros. Calculate how many euros the bank deposit will be worth in 4 years!

- a. 1184,49
- b. 1215.51
- c. 1200
- d. 1050

Calculate the weighted arithmetic mean of the numbers below. Enter the result with at least 2 decimal places!

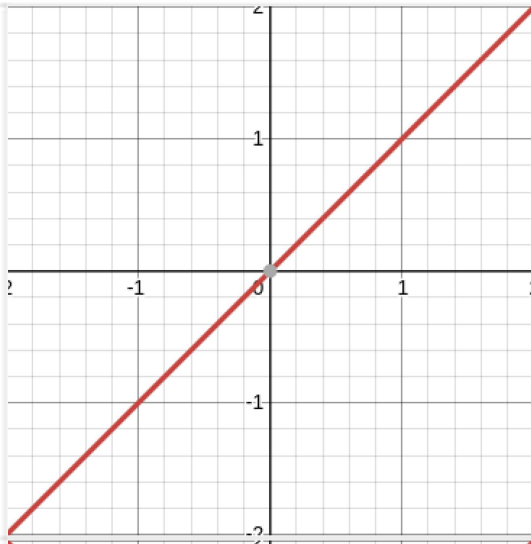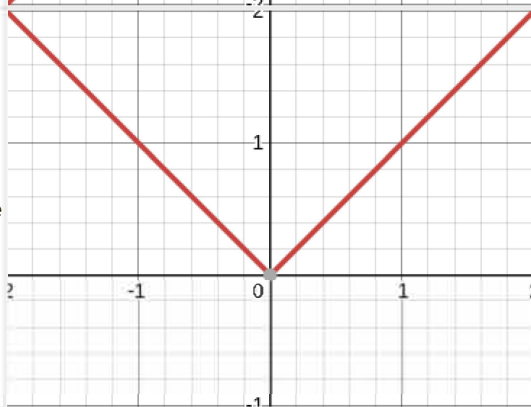| numbers	weights
2	1
5	3
6	2

Answer:

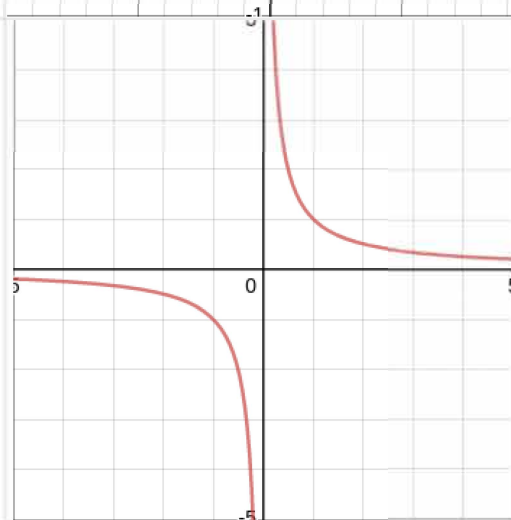Graph the following function: $y = 7(x - 2)(x - 14)$
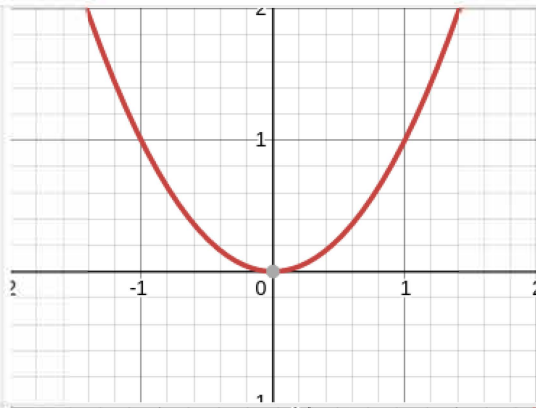
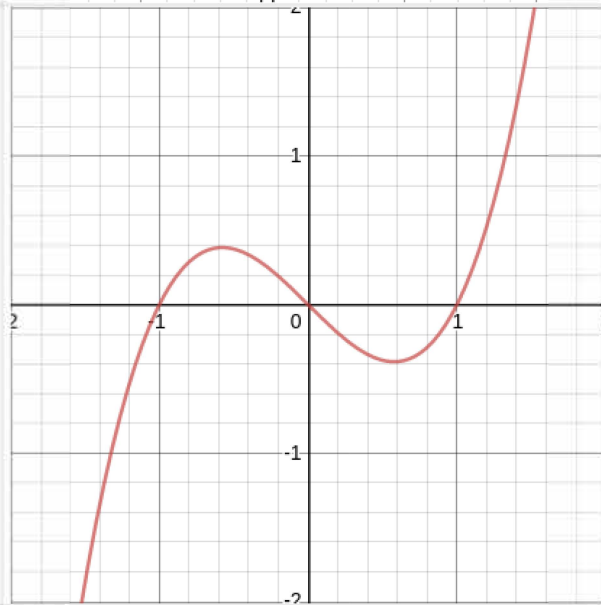First, choose the type of the graph.
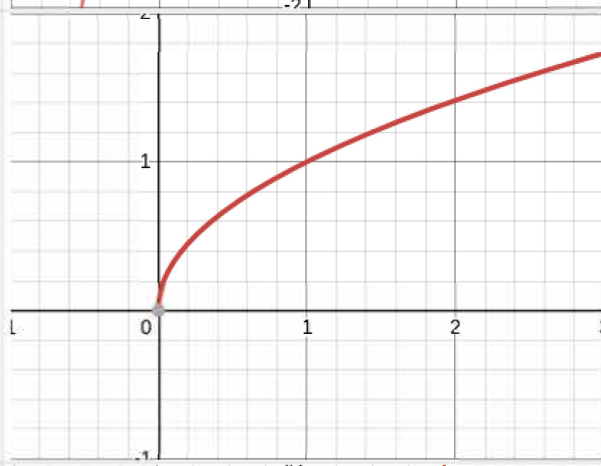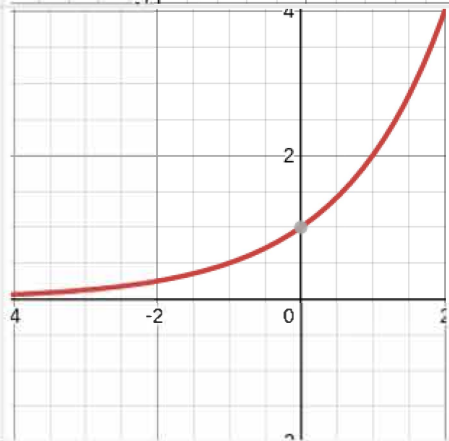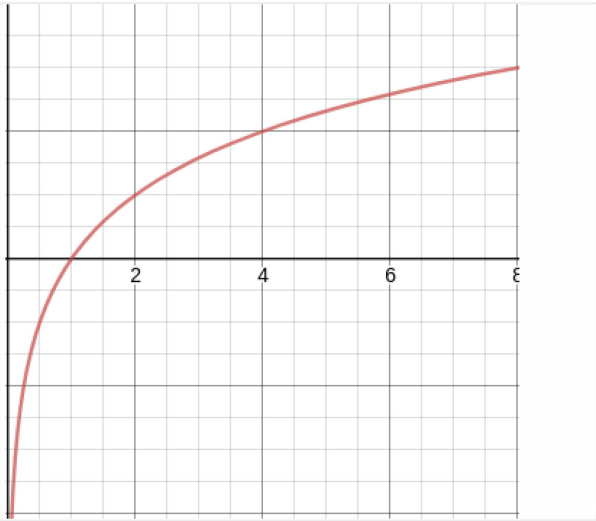
a) linear

b) absolute value

c) hyperbola

d) parabola

e) cubic

f) radical

g) exponential

h) logarithmic

- ○ a)
- ○ b)
- ○ c)
- ○ d)
- ○ e)
- ○ f)
- ○ g)
- ○ h)
- ○ I do not know the answer. (0 points)

Graph the following function: $y = 7(x - 2)(x - 14)$

What is the **domain** of the function? (Choose one option.)

- ○ 1. x∈Q
- ○ 2. x=2
- ○ 3. y≤-252.00
- ○ 4. x≠0
- ○ 5. y≥-252.00
- ○ 6. y≥0
- ○ 7. x∉N
- ○ 8. y∈Z
- ○ 9. y=0
- ○ 10. y∉Q
- ○ 11. x∉Q
- ○ 12. y≤0
- ○ 13. x≤0
- ○ 14. x=0
- ○ 15. y≠-252.00
- ○ 16. y∉N
- ○ 17. x∈Z
- ○ 18. x≥0
- ○ 19. y>-252.00
- ○ 20. x<2
- ○ 21. x>0
- ○ 22. x<0
- ○ 23. y∈R
- ○ 24. y>0
- ○ 25. y≠0
- ○ 26. x>2
- ○ 27. x∉R
- ○ 28. x≠2
- ○ 29. y∈Q
- ○ 30. x≥2
- ○ 31. y∈N
- ○ 32. x≤2
- ○ 33. y=-252.00
- ○ 34. y<0
- ○ 35. y∉Z
- ○ 36. y<-252.00
- ○ 37. x∈N
- ○ 38. y∉R
- ○ 39. x∉Z
- ○ 40. x∈R

Graph the following function: $y = 7(x-2)(x-14)$

What is the **range** of the function? (Choose one option.)

- ○ 1. y≤0
- ○ 2. x∉N
- ○ 3. y=0
- ○ 4. x≤0
- ○ 5. y>0
- ○ 6. x∉Z
- ○ 7. x=2
- ○ 8. y∈R
- ○ 9. x<2
- ○ 10. y=-252.00
- ○ 11. x∈Q
- ○ 12. y≤-252.00
- ○ 13. y∈N
- ○ 14. x>0
- ○ 15. x=0
- ○ 16. x≤2
- ○ 17. x≥2
- ○ 18. y≥-252.00
- ○ 19. x∈N
- ○ 20. y∉Q
- ○ 21. x∈R
- ○ 22. y<-252.00
- ○ 23. y≠0
- ○ 24. y∉Z
- ○ 25. x>2
- ○ 26. x∉Q
- ○ 27. x≠2
- ○ 28. x∉R
- ○ 29. y>-252.00
- ○ 30. y∈Q
- ○ 31. y∉R
- ○ 32. x<0
- ○ 33. x≠0
- ○ 34. y≠-252.00
- ○ 35. x≥0
- ○ 36. y∈Z
- ○ 37. y∉N
- ○ 38. y<0
- ○ 39. y≥0
- ○ 40. x∈Z

Graph the following function: $y = 7(x - 2)(x - 14)$

What is the **y-intercept** of the function? (Type in the answer.)

Answer:

Factorize the following expression: $7x^2 - 112x + 196$

a) $7(x + 2)^2$

b) $7(x - 2)^2$

c) $7(x + 2)(x - 2)$

d) $7(x + 14)(x - 2)$

e) $7(x - 2)(x - 14)$

f) $7(x + 14)^2$

g) $7(x - 14)^2$

○ a

○ b

○ c

○ d

○ e

○ f

○ g

○ I do not know the answer. (0 points)

Simplify the following fraction: $\frac{7x^2-112x+196}{x^2-196}$

a) 1

b) x

c) x^2

d) $7\frac{x+14}{x-14}$

e) $7\frac{x-2}{x+14}$

f) $\frac{7x-28}{196}$

g) $7x-224$

- ○ a
- ○ b
- ○ c
- ○ d
- ○ e
- ○ f
- ○ g
- ○ I do not know the answer. (0 points)

Find all solutions to the following system of equations:

$2x + 12y = 18$
$8x + 49y = 72$

Type in the value of x.

Answer: [   ]

Find all solutions to the following system of equations:

$2x + 12y = 188x + 49y = 72$

Type in the value of y.

Answer: [   ]

Let us consider the following three polynomials:

\(P_1(x)= 3x^2-x+4 \)

\(P_2(x)= x^3+x^2 \)

\(P_3(x)= x^2-1 \)

Find the corresponding operation for each expression below!

\(x^3+4x^2-x+4 \)	Choose...
\(3x^4-x^3+x^2+x-4\)	Choose...
\(x^4-2x^2+1 \)	Choose...
\(x^3+1 \)	Choose...
\(\frac{x^2}{x-1} \)	Choose...

Jump to...