

A

J(2, -3), K(-1, 2),
L(-3, 4)

Solve

$$\sqrt{9x - 20} = x$$

B

$$x = 6$$

$$y = 15$$

Factor and find the solutions.

$$5x^2 + 8x + 3 = 0$$

C

40, 2 irrational solutions

The following function models how much money a certain company makes after a certain amount of time in months.

During what month did they make the least amount of money?

$$v(t) = 400 - 12t + .3t^2$$

D

293.71

Graph $y = x^2 - 6x - 7$.

**Tell the vertex,
x-intercepts,
y-intercept,
and axis of symmetry.**

E

2032

**Describe how the
parabola
 $y = -3(x + 5)^2 - 2$ is
shifted from $y = x^2$.**

F

$(2, 3), (6, -4),$
 $(5, 0)$

Find the exact
values of the
solutions

$$8x^2 = 6x + 7$$

H

$$y = 12.62(.844)^x$$

Pd-100 has a half-life of 6.3 days. If one had 2652 atoms the first day, how many atoms would be present after 20 days?

I

7

In 2012, you put \$1200 into a savings account earning 6% annual interest. In what year will the account be worth \$4000?

J

15

Solve

$$2(x + 2)^{\frac{3}{2}} + 5 = 59$$

K

20

**Find the vertices of
triangle JKL with a
90° rotation.**

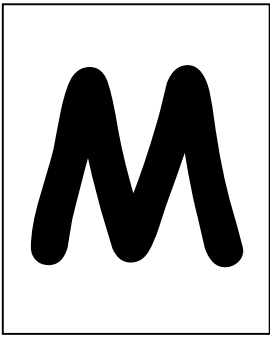
**J(3, -2), K(-4, -6),
L(0, -5)**

L

$-3/5$ or -1

**Find the discriminant
and tell the
number/type of
solutions.**

$$3b^2 + 4b - 2 = 0$$



4 and 5

Find an equation in point ratio form with the points $(2, 9)$ and $(3, 7.6)$. Round your "b" value to three places.

N

Reflect over x-axis,
vertical stretch by 3,
left 5 and down 2

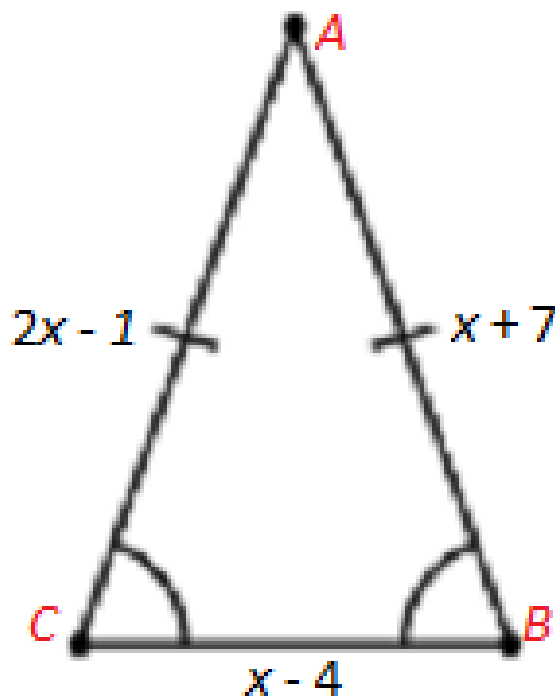
Solve the inequality.

$$0 \leq 3x^2 - 16x + 5$$

0

$$\frac{3 \pm \sqrt{65}}{8}$$

Solve for segment AC.



P

Vertex: $(3, -16)$

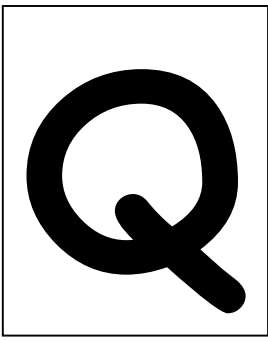
X-int: $(7, 0), (-1, 0)$

Y-int: $(0, -7)$

AoS: $x = 3$

Solve for x and y .

$$\left(\frac{3^x}{4^5}\right)^{-3} = \frac{4^y}{3^{18}}$$



Domain: $x > -7$

Range: All real #s

Asymptote: $x = -7$

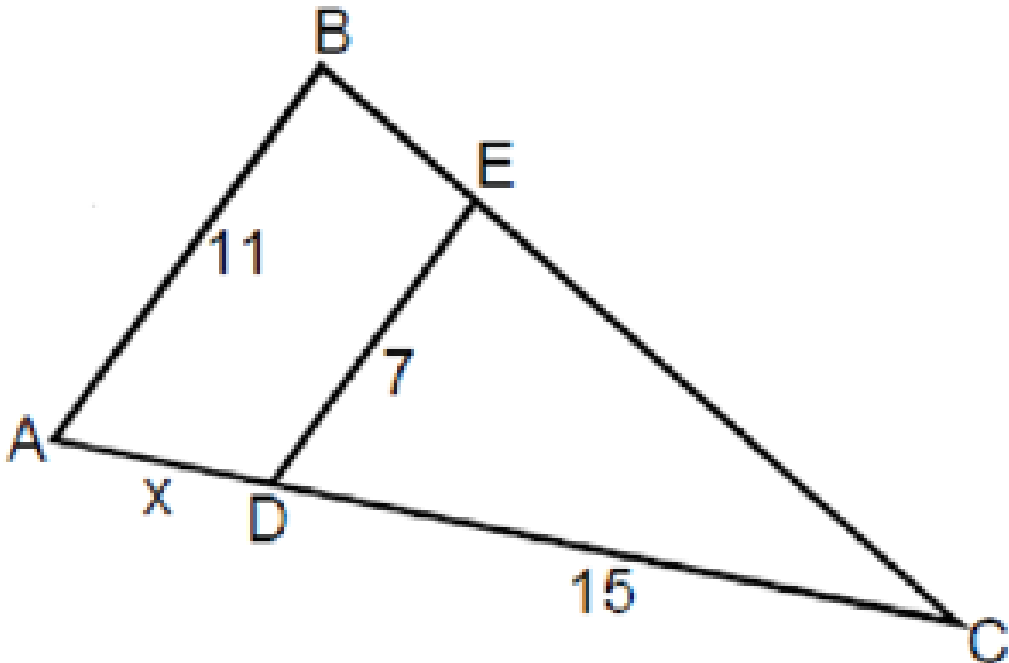
Solve $81x^4 - 100x^2 = 0$.

R

$$y = -1.5x^2 - 3x + 12$$

$$\triangle CDE \sim \triangle CAB$$

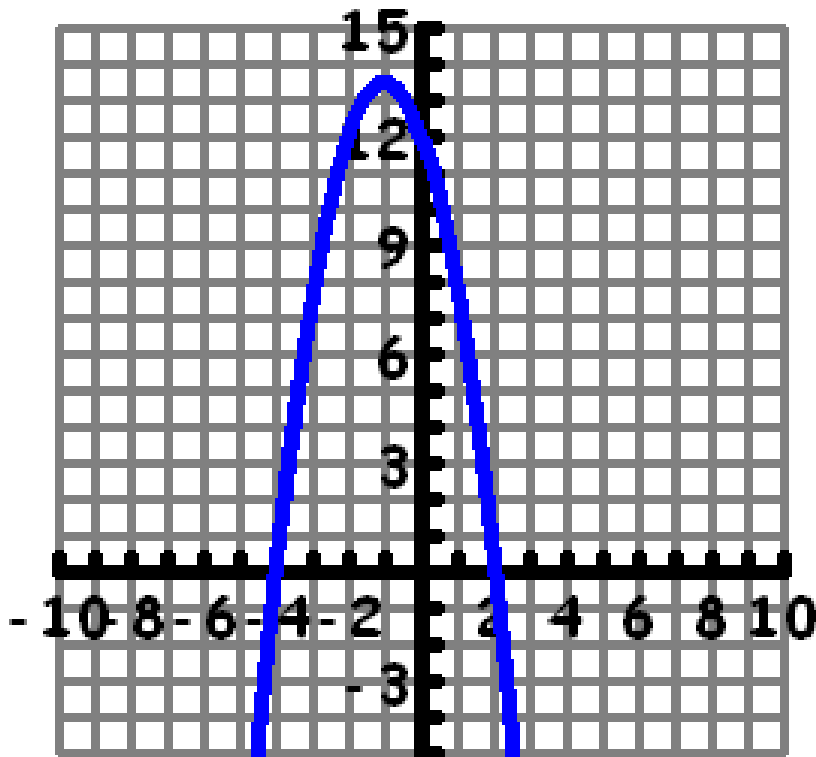
Solve for x .

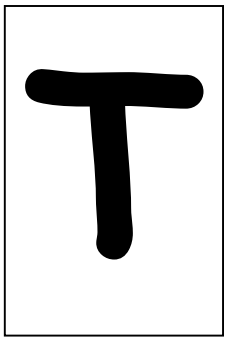


S

6.5

Write equation of the quadratic shown in standard form. (Vertex is $(-1, 13.5)$)





$$x = 0, \frac{10}{9}, -\frac{10}{9}$$

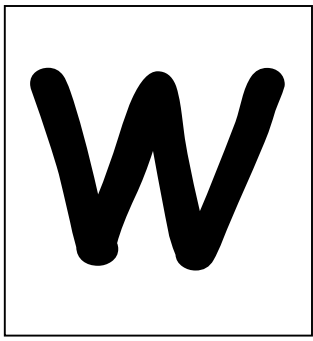
The half-life for Radium is 85 days. If you have 2500 mg of Radium, how much will remain after 2 years?

V

$$\left\{x \mid x \leq \frac{1}{3} \text{ or } x \geq 5\right\}$$

Find the domain and range
and asymptote for

$$y = \log(x + 7) - 8$$



$$x = \frac{60}{7}$$

**Given $\triangle JKL$, reflect
over $y = -x$ and
translate $\langle 3, -1 \rangle$.**

**$J(2, 1)$, $K(-3, 4)$,
 $L(-5, 6)$**

