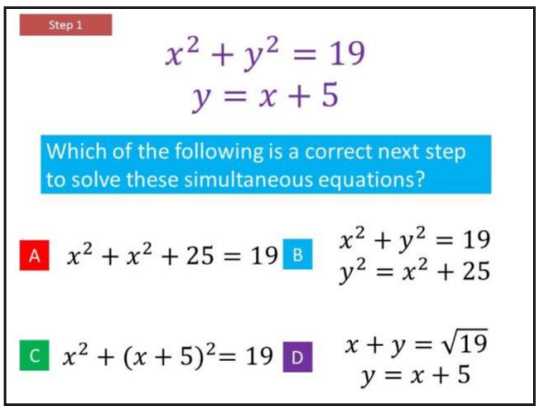
New Maths GCSE: A19 - Linear and Quadratic Simultaneous Equations: Step-by-step

Name:..... Date:.....



Correct Answer: A B C D

Explanation:

.....

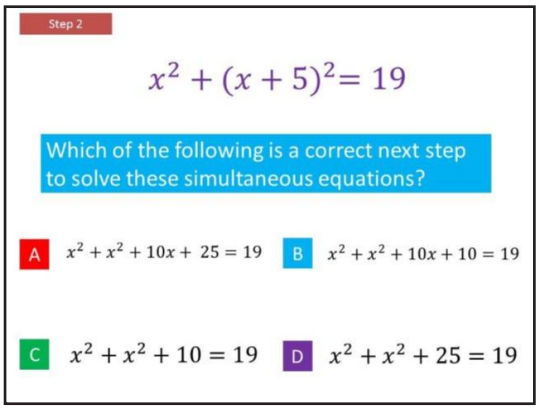
.....

.....

.....

.....

.....



Correct Answer: A B C D

Explanation:

.....

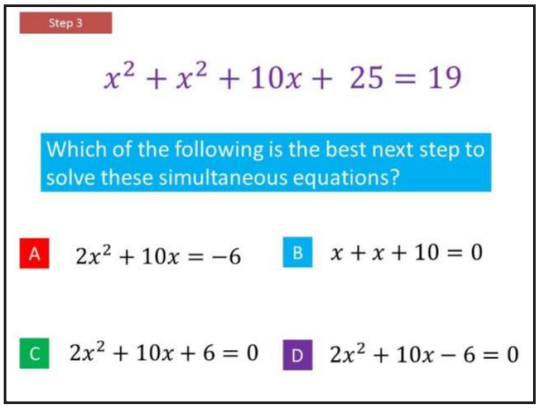
.....

.....

.....

.....

.....



Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Step 4

$$2x^2 + 10x + 6 = 0$$

Having discovered it doesn't factorise, Which of the following is the best next step to solve this equation?

A $x = \frac{-2 \pm \sqrt{10^2 - 4 \times 12}}{20}$

B $x = \frac{-10 \pm \sqrt{10^2 - 4 \times 12}}{4}$

C $x = \frac{10 \pm \sqrt{10^2 - 4 \times 12}}{4}$

D $x = -10 \pm \frac{\sqrt{10^2 - 4 \times 12}}{4}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Step 5

$$x = \frac{-10 \pm \sqrt{10^2 - 4 \times 12}}{4}$$

Using your calculator, what are the two solutions?

A $x = 0.541$, $x = -5.541$

B $x = -8.197$, $x = -11.803$

C $x = -0.697$, $x = -4.303$

D $x = -6.394$, $x = -13.606$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Step 6

$x = -0.697$
$x = -4.303$

$$x^2 + y^2 = 19$$
$$y = x + 5$$

What is the next best step to solve these simultaneous equations?

A $y = 4.303$, $y = 0.697$

B $y = -5.697$, $y = -9.303$

C $y = 5.697$, $y = 9.303$

D $y = -4.303$, $y = -0.697$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

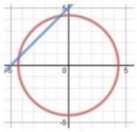
.....

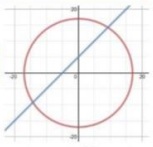
.....

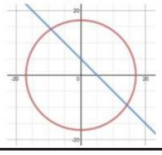
Step 7

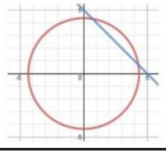
$$x^2 + y^2 = 19$$
$$y = x + 5$$

Which diagram represents these two equations?

A 

B 

C 

D 

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....