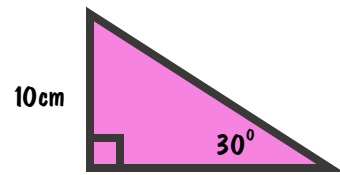


Learning Grid – Higher Revision Mat (Roll two dice to find your question)

6



Find the length of the hypotenuse

Factorise and solve:

$$x^2 + 5x - 24$$

Solve the simultaneous equations:

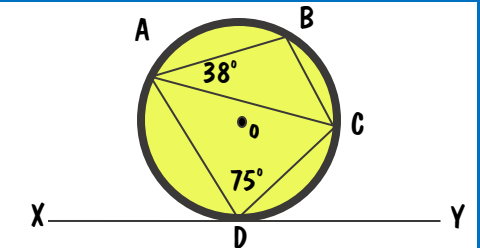
$$\begin{aligned} 2x + 3y &= 17 \\ 3x + 5y &= 27 \end{aligned}$$

Simplify:

$$\frac{3x + 15}{5x + 25}$$

Solve and express on a number line:

$$4x + 1 \leq 3x - 5$$



Find angle ABC in circle centre O

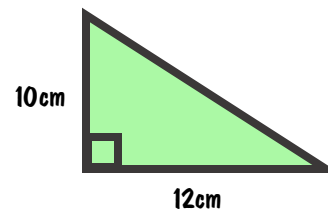
5

Solve the simultaneous equations:

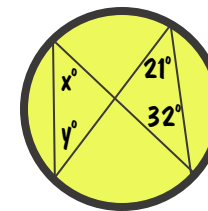
$$\begin{aligned} 2x - 4y &= 2 \\ 3x + 5y &= 25 \end{aligned}$$

Solve and express on a number line:

$$2x + 3 \geq x + 1$$



Find the length of the hypotenuse



Find the angles shown with an x and y

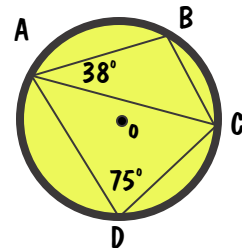
Complete the square:

$$x^2 + 8x + 20$$

Simplify:

$$\frac{x^2 + 4x + 3}{6x + 18}$$

4



Find angle BCA in circle centre O

Complete the square:

$$x^2 - 6x + 10$$

Simplify:

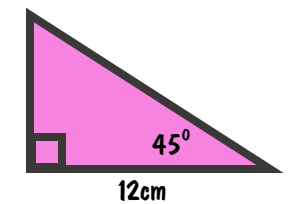
$$\frac{x^2 + 8x - 33}{x^2 - 9}$$

Solve the simultaneous equations:

$$\begin{aligned} 4x - 2y &= 10 \\ 2x - 5y &= -23 \end{aligned}$$

Solve and express on a number line:

$$3x - 12 \leq x - 4$$

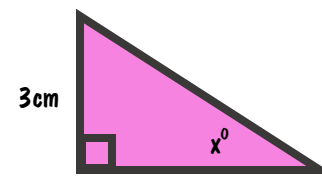


Find the length of the hypotenuse

3

Solve the simultaneous equations:

$$\begin{aligned} y &= x^2 + 2x - 3 \\ y &= 2x + 1 \end{aligned}$$



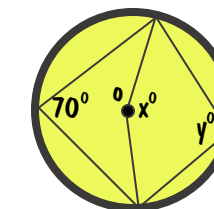
Find the angle marked x

Factorise:

$$x^2 - 9x + 20$$

Solve and express on a number line:

$$5x - 12 \leq 3x + 4$$

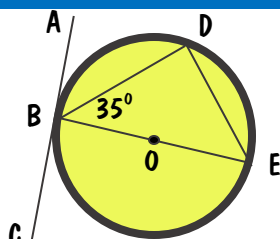


Find the angles x and y in the circle with centre o

Simplify:

$$\frac{6x}{5} \div \frac{3}{4x}$$

2



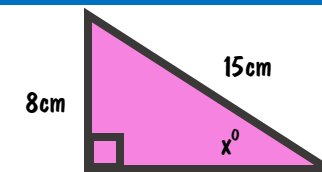
Find the angle ABD

Solve and express on a number line:

$$2x + 5 > 4x + 1$$

Solve the simultaneous equations:

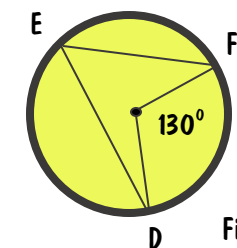
$$\begin{aligned} y &= x^2 - 2x - 5 \\ y &= x - 1 \end{aligned}$$



Find the angle marked x

Factorise:

$$2x^2 + 4x - 3$$



Find the angle DEF

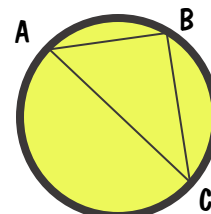
1

Solve and express on a number line:

$$5x + 2 < 2x + 11$$

Simplify:

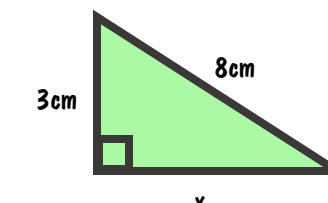
$$\frac{21x - 14}{8x} \times \frac{4}{24x^2 - 16x}$$



Find the angle ABC where AC is the diameter:

Factorise:

$$x^2 + 7x + 10$$



Find the side length marked x

Solve the simultaneous equations:

$$\begin{aligned} x^2 + y^2 &= 25 \\ x + y &= 7 \end{aligned}$$

1

2

3

4

5

6