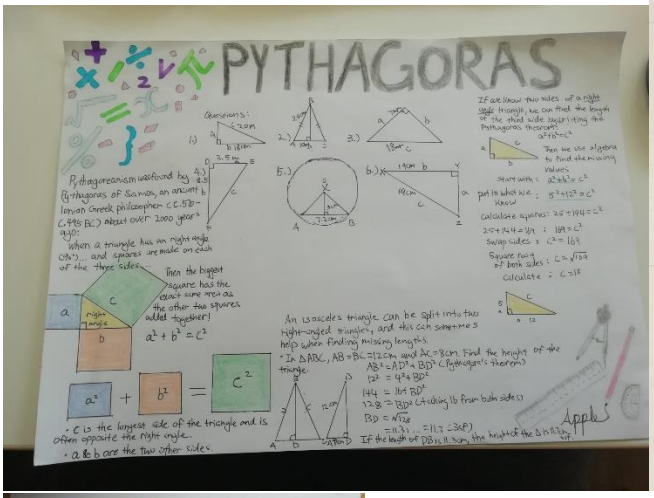
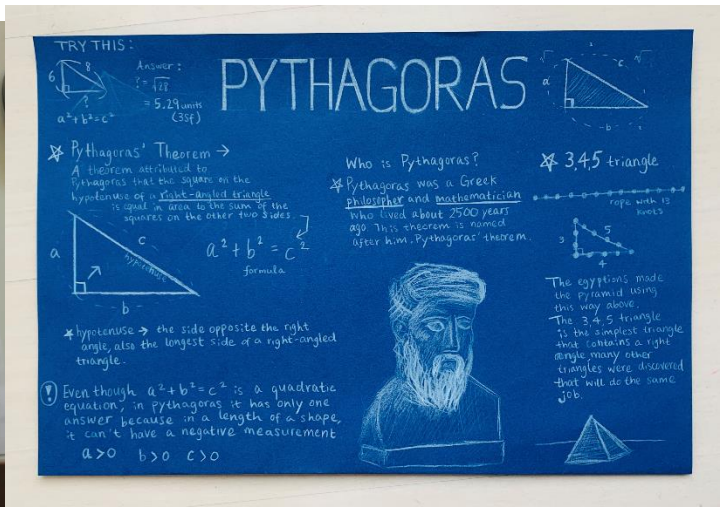
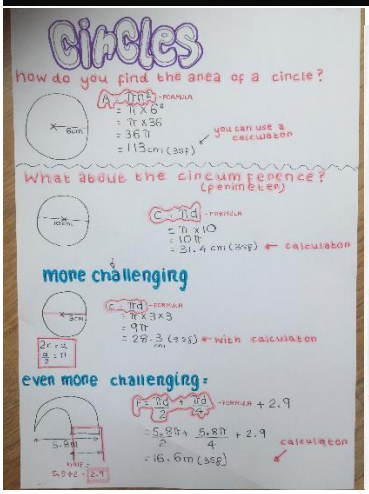
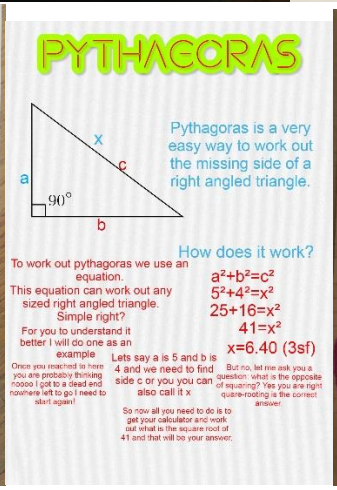
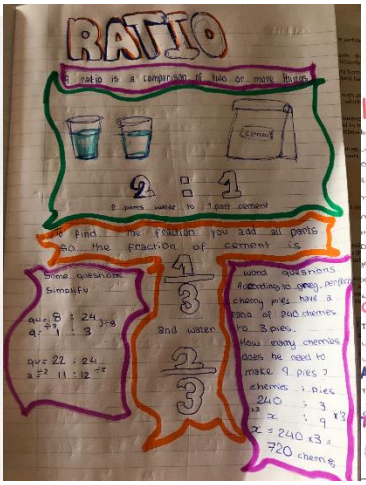
Form 2 were asked to make a poster of the favourite topic they have studied this term. They could choose between Ratios, Circles or Pythagoras' Theorem. Here is a selection of them. Pythagoras looks to be the clear winner.

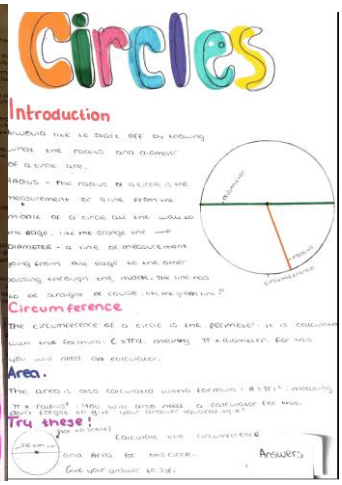


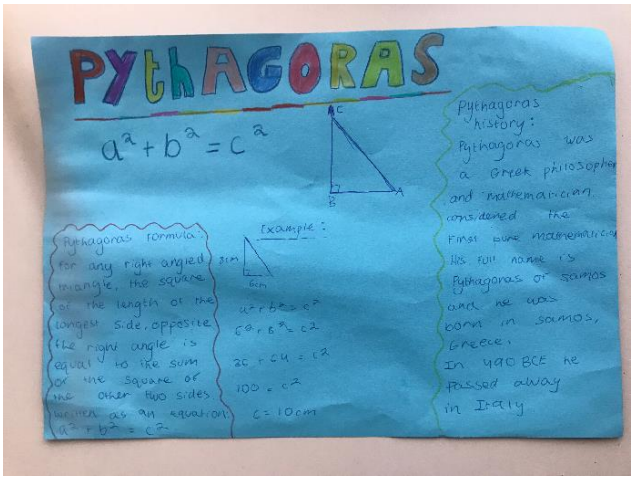


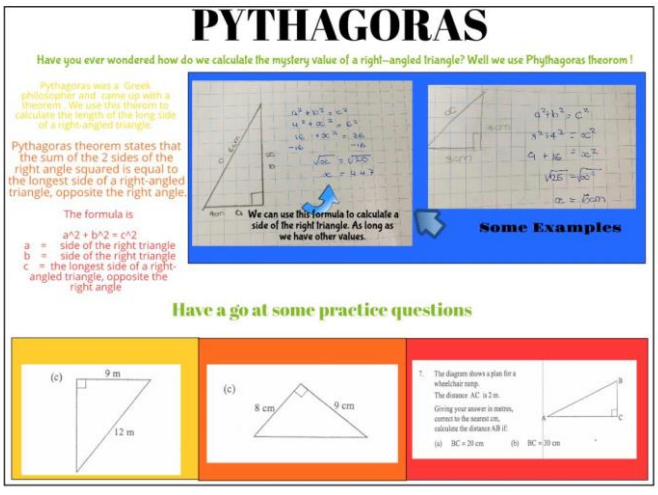


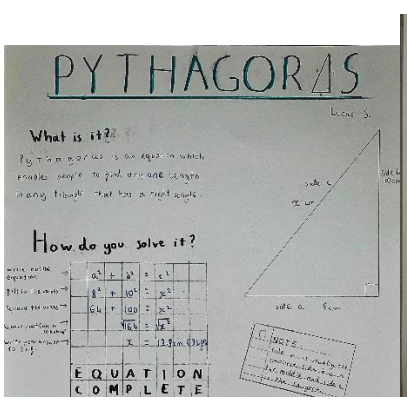


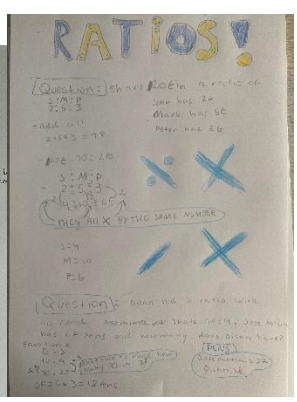


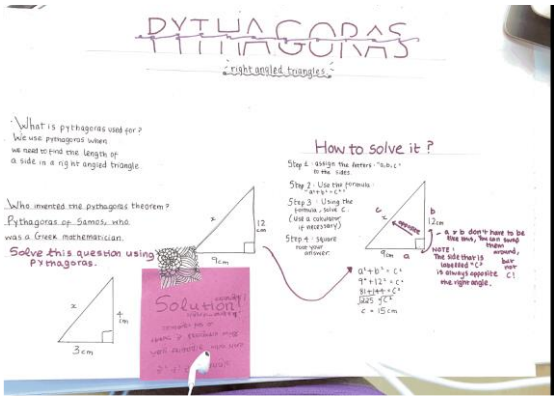


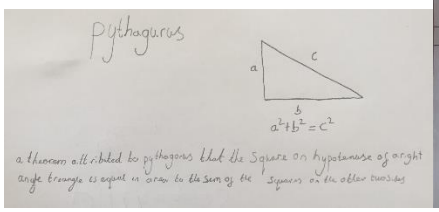


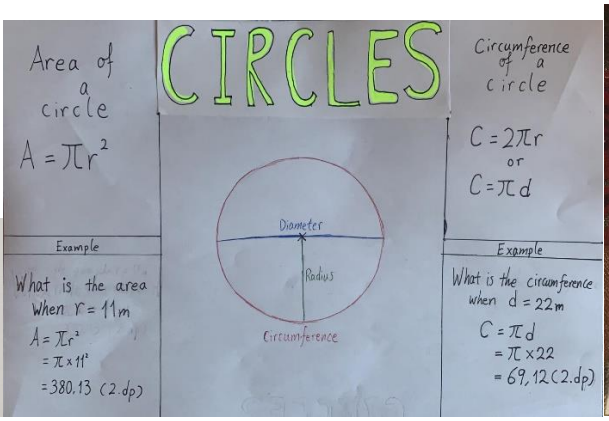


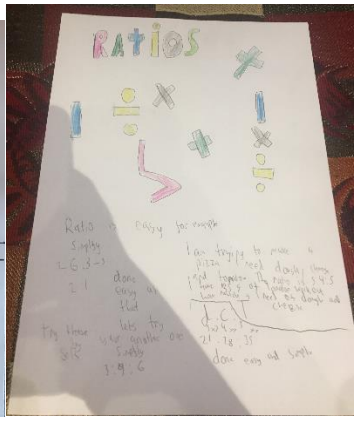


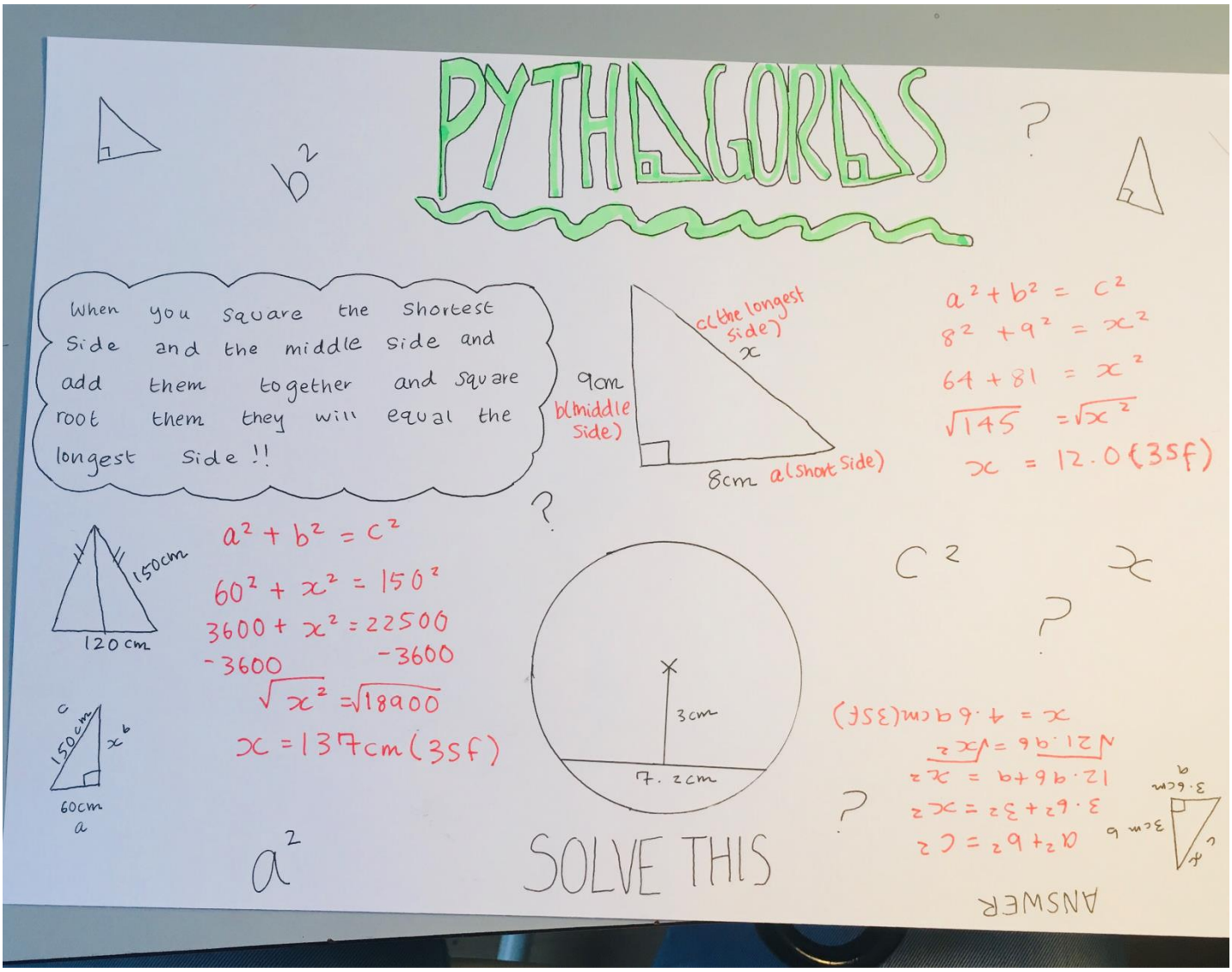





Pythagoras
a
c
b
$a^2+b^2=c^2$
a theorem attributed to pythagoras that the square on hypotenuse of right angle triangle is equal in area to the sum of the squares on the other two sides


Area of a circle
$A=\pi r^2$
CIRCLES
Circumference of a circle
$C=2\pi r$
or
$C=\pi d$
Example
What is the area when r = 11m
$A=\pi r^2$
$=\pi \times 11^2$
$=380.13$ (2.dp)
Diameter
Radius
Circumference
Example
What is the circumference when d = 22m
$C=\pi d$
$=\pi \times 22$
$=69,12$ (2.dp)


RATIOS


PYTHAGORAS
When you square the shortest side and the middle side and add them together and square root them they will equal the longest side !!
c (the longest side)
x
9cm
b (middle side)
8cm a (short side)
$a^2+b^2=c^2$
$8^2+9^2=x^2$
$64+81=x^2$
$\sqrt{145}=\sqrt{x^2}$
$x=12.0$ (3sf)
150cm
120 cm
$a^2+b^2=c^2$
$60^2+x^2=150^2$
$3600+x^2=22500$
$-3600 \quad -3600$
$\sqrt{x^2}=\sqrt{18900}$
$x=137$cm (3sf)
c
150cm
x
b
60cm
a
3cm
7.2cm
SOLVE THIS
a^2
c^2
x
$x=4.69$cm (3SF)
$\sqrt{21.96}=\sqrt{x^2}$
$12.96+9=x^2$
$3.6^2+3^2=x^2$
$a^2+b^2=c^2$
3cm b
3.6cm
a
ANSWER