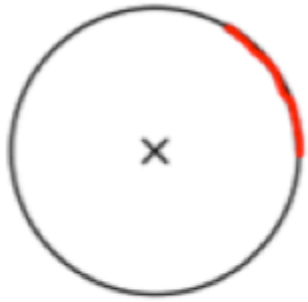
July 30th	5-a-day	Numeracy
List the first 5 multiples of 3 5, 10, 15	List the factors of 10 1, 2, 5, 10	
It costs £40 to hire a car for the first day, then £15 per extra day. How much does four days cost? Day 1 = £40 Day 2 = £55 Day 3 = £70 Day 4 = £85		
Bill has £60 He gives ¼ to his mum He gives ⅔ to his friend He keeps the rest How much does:	His mum receive? £15 His friend receive? £40 Bill receives? £5	
15 26 35 37 40 54 60 72 From the list write down: A factor of 30 15	A multiple of 7 35	
1.75 2.2 4.5 8 30	1 litre is approximately ..1.75.. pints 1 foot is approximately ..30.. centimetres 5 miles is approximately ..8.. kilometres	

July 30	5-a-day	Foundation



What part of the circle is shown? (in red)

Arc

There are 95 girls in a school.
The ratio of boys to girls is 4:5

How many boys go to the school?

$95 \div 5 = 19$

19
× 4
76

	French	Art
Female	8	3
Male	7	5

11

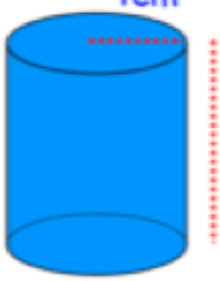
12

23

A student is chosen at random.

What is the probability they are female?

$\frac{11}{23}$



Calculate the volume

$\pi \times 4^2 \times 20 = 320\pi$

or $1005.3 cm^2$

Simplify

$y^5 \times y^2$

y^7

Simplify

$y^{10} \div y^2$

y^8

July 30	5-a-day	Higher

Factorise

$y^2 + 8y + x^2y$

$y(y+8+x^2)$

Factorise

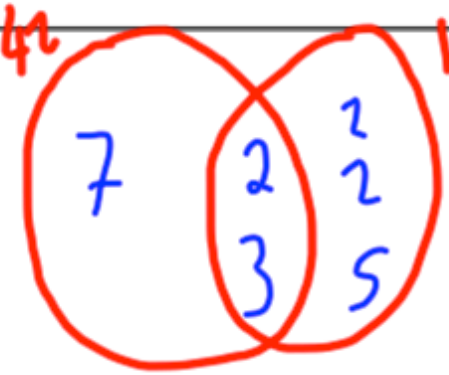
$4y^2 - 49$

$(2y-7)(2y+7)$

A light flashes every 42 seconds.
A buzzer buzzes every 2 minutes.
They both operate, how long until they both operate again?

$120 = 2\times2\times2\times3\times5$

$42 = 7\times2\times3$



LCM $= 7\times2\times3\times2\times2\times5 = 840$

14 minutes.

Work out

$\dfrac{(y-2)^2}{4y}$ if $y = 3.2$

$\dfrac{(3.2-2)^2}{12.8}$

$\dfrac{1.2^2}{12.8} = 0.1125$

Calculate the distance XZ.

$XZ^2 = 5.5^2 + 6.5^2$

$XZ^2 = 72.5$

$XZ = 8.5147$ miles

What is the bearing of Z from X?

$\tan y = \dfrac{5.5}{6.5}$ $y = 40.24^\circ$

220° (220.24°)

What is the bearing of X from Z?

40.24°

040° (040.24°)