

lots of NUMBER 5 ANSWERS

Average annual wage for pilot £91,045

What is this wage to the nearest thousand?

Choose 91000 or 92000

The number is in between these but closer to 91000.

Answer 91045 is 91000 to the nearest thousand

239,831 miles
The distance from the Earth to the Moon

What is this distance to the nearest thousand?

Between 239000 and 240000

The number is in between these but closer to 240000.

Answer 239,831 is 240000 to the nearest thousand

50,000 watch
Chelsea LOSE!

This is a newspaper headline
The attendance is given correct to the nearest thousand.
What is the smallest possible attendance?

This is probably not the exact attendance.

Answer Smallest possible attendance is 49500

Biggest possible attendance is 50499

(It can't be 50500 because that would round up to 51000)

I am thinking of number
that is 6600 when
rounded to the nearest 100

Atlanta

What is the smallest number that Atlanta could be thinking about?

Answer Smallest possible is 6550

This Snowman is 31.25m tall.

Charlie

nearest whole number
means that it is either
30 or 31 or 32

What is the height of the snowman to the nearest whole number?

Answer Height is 31m to nearest m

This Snowman is 31.255m tall.

Charlie

What is the height of the snowman to 1 decimal place?

Answer 31.3m because we look at the next digit

$$\sqrt{7} = 2.645751311$$

Find this square root to 1 decimal place

Answer 2.6 because we look at the next digit

Find to 2 decimal places

Answer 2.65 because we look at the third digit

$$\sqrt{52} + (9.11)^3 = 763.2691336$$

Find this calculation to 1 decimal place

Answer 763.3 because we look at the second decimal digit

Find to 2 decimal places

Answer 763.27 because we look at the third decimal digit

$$\sqrt[3]{67}$$

$$=4.0615481$$

Find this cube root to 1 decimal place

Answer **4.1** because we look at the second decimal digit

Find to 2 decimal places

Answer **4.06** because we look at the third decimal digit

An Assembly Hall has desks set out in a rectangular shape.
There are 17 rows with 21 desks in each row.
Estimate how many desks there are altogether.

$$17 \times 21$$

$$\approx 20 \times 20$$

$$\approx 400$$

Look at changing all the numbers to make the calculation easier to do



7 friends go out for dinner.
The total bill is £62.88
Estimate how much each meal cost.

$$62.88 \div 7$$

$$\approx 63 \div 7$$

$$\approx \text{£}9$$

Look at changing all the numbers to make the calculation easier to do



$$4.16 \times 8.95$$

Estimate this calculation

$$4.16 \times 8.95$$

$$\approx 4 \times 9$$

$$\approx 45$$

Look at changing all the numbers to make the calculation easier to do



$$(8.95)^2$$

Estimate this calculation

$$(8.95)^2$$

$$\approx 9^2$$

$$\approx 81$$

Look at changing all the numbers to make the calculation easier to do



$$\frac{35.88}{8.95}$$

Estimate this calculation

$$\frac{35.88}{8.95}$$

$$\approx \frac{36}{9}$$

$$\approx 4$$

Look at changing all the numbers to make the calculation easier to do



$$\frac{97 + 368}{45}$$

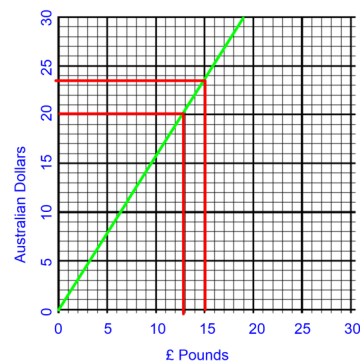
Estimate this calculation

$$\frac{100 + 400}{50}$$

$$\approx \frac{500}{50}$$

$$\approx 10$$

Look at changing all the numbers to make the calculation easier to do



Convert £15 into AUS \$

Draw a line.

£15 = \$23.50

Convert AUS\$20 into £

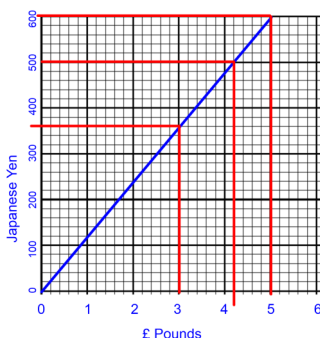
\$20 = £13

Convert AUS\$100 into £

\$20 = £13

multiply by 5

\$100 = £65



Convert £3 into Yen

Draw a line.

£3 = 360Yen

Convert 500Yen into £

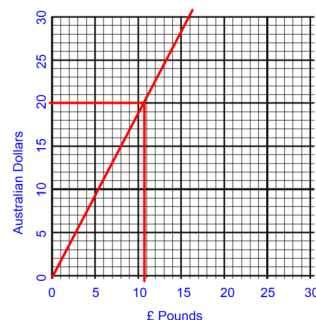
500Yen = £4.20

Convert £200 into Yen

£5 = 600Yen

multiply by 40

£200 = 24000Yen



Using £10=AUS\$19

Draw the conversion graph then

Convert £15 into AUS \$

Draw a line.

£15 = \$28.50

Convert AUS\$20 into £

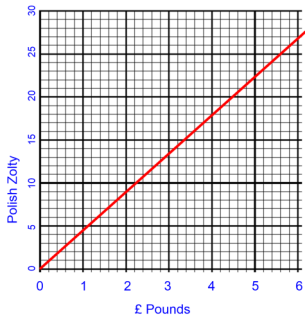
\$20 = £10.50

Convert AUS\$100 into £

\$20 = £10.50

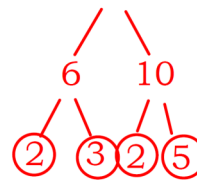
multiply by 5

\$100 = £52.50



Using £1 = 4.50 Zolty
 Draw the conversion graph then
 Convert £3 into Zolty
 $£3 = 13.50$ Zolty
 Convert 20 Zolty into £
 20 Zolty = $£4.50$
 Convert £400 into Zolty
 $£4 = 18$ Zolty
 multiply by 100
 $£400 = 1800$ Zolty

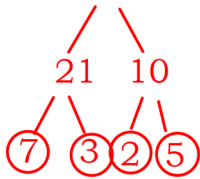
Express 60 as a product of prime factors



This can be split up different ways to get into prime factors but you will always get the same numbers at the end.

$$60 = 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$$

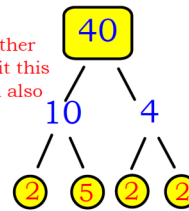
Express 210 as a product of prime factors



This can be split up different ways to get into prime factors but you will always get the same numbers at the end.

$$210 = 2 \times 3 \times 5 \times 7$$

There are other ways to split this up that will also be correct!



Complete this factor tree for 40
 Then write as a product of prime factors

$$40 = 2 \times 2 \times 2 \times 5$$

$$40 = 2^3 \times 5$$

This is a number written as a product of primes.

What is the number?

$$3^2 \times 5 \times 7^2 =$$

What is the smallest integer that you need to multiply this by so that you get a square number?

Multiply it by 5 then you get
 $3^2 \times 5^2 \times 7^2 =$ a square number because
 it is $3 \times 5 \times 7 = 105$
 and then $3^2 \times 5^2 \times 7^2 = 105^2$

Sally says

The HCF of 20 and 25 is 100.

Explain why Sally is wrong.

The HCF is 5.

Sally found the Lowest Common Multiple LCM of 20 and 25



Bob has a large bag of sweets which has less than 100 sweets.
 He can share them exactly between 4 without having any left over.
 He can share them exactly between 5 without having any left over.
 He can share them exactly between 6 without having any left over.

How many sweets are there in Bob's bag of sweets?

Must find the LCM of 4, 5 and 6

Multiples of 4 are 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, ...

Multiples of 5 are 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, ...

Multiples of 6 are 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, ...

Answer is LCM is 60

What is the Highest Common Factor of 120 and 100?

Factors of 120 are 1, 120, 2, 60, 3, 40, 4, 30, 5, 24, 6, 20, 8, 15, 10, 12

Factors of 100 are 1, 100, 2, 50, 4, 25, 5, 20, 10

HCF is 20

What is the lowest common multiple of 8, 10 and 15?

Multiples of 8 are 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, ...

Multiples of 10 are 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ...

Multiples of 15 are 15, 30, 45, 60, 75, 90, 105, 120, 135, ...

LCM is 120

Sally has a staircase to climb up to her apartment.

She can take the stairs 4 at a time and arrive at the top exactly.

She can take the stairs 5 at a time and arrive at the top exactly.

If she takes 3 stairs at a time she will not arrive at the top exactly.

What is the smallest number of stairs in this staircase?

Must find the LCM of 4, 5 and 3

Multiples of 4 are 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, ...

Multiples of 5 are 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, ...

Multiples of 3 are 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, ...

Answer is LCM is 20