

MATHEMATICS 18th MAY to 21ST MAY 2020

Monday May 18th

Converting between fractions, decimals and percentages

Fraction	Decimal	Percentage
1/2	0.5	50%
25/100	0.25	25%
1/10	0.1	10%
1/3	0.333	33.333%
7/10	0.7	70%
2/5	0.4	40%

Fraction	Decimal	Percentage
68/100	0.68	68%
35/100	0.35	35%
6/10	0.6	60%
5/100	0.05	5%
13/50	0.26	26%

Nathan carried out a survey in the class to find out students' favourite subject. 0.32 of the class answered maths. What percentage of the class is this?

32%

Use the information given to complete the table

Fraction	Decimal	Percentage
1/8	0.125	12.5%
2/8	0.25	25%
3/8	0.375	37.5%
4/8	0.5	50%
5/8	0.625	62.5%
6/8	0.75	75%
7/8	0.875	87.5%

Tuesday May 19th

Finding fractions of given amounts/numbers

1. A = 8
B = 16
C = 6
D = 18
E = 5
F = 25

2.
A = £21
B = £36
C = £1.20
D = £ 10.45
E = £2. 44
F = £ 19.60

Julie has £4.50 pocket money every week.

If she spends $\frac{2}{5}$ of it on a magazine and $\frac{1}{3}$ of it on a dance lesson, how much of the pocket money does she have left?

$\frac{2}{5}$ of £4.50 = £1.80 magazine
 $\frac{1}{3}$ of £ 4.50 = £1.50 dance lessons

£ 1.80 + £1.50 = £ 3.30
£4.50 - £ 3.30 = £1.20 left

Wednesday May 20th

Finding percentages of amounts

1. 60
2. £ 40
3. 375
4. 2.5
5. 19
6. 69
7. £4.50
8. 0.4

Jamie received £26 pocket money last week. He spent it as follows:

10% on sweets

25% on magazines

15% on games

How much did Jamie have left? Show your working.

$$10\% \text{ of } \pounds 26 = \pounds 2.60$$

$$25\% \text{ of } \pounds 26 = \pounds 6.50$$

$$15\% \text{ of } \pounds 26 = \pounds 3.90$$

$$\text{Total} = \pounds 13.00$$

$$\pounds 26.00 - \pounds 13.00 = \pounds 13.00$$

Thursday May 21st

Solve problems involving fractions and percentages

There are 60 beads in a bag. The beads are red, yellow or blue.

40% of the beads are blue.

$\frac{5}{12}$ of the beads are red.

How many beads are yellow?

$$(40 \div 100) \times 60 = 24 \text{ blue beads}$$

$$(5 \div 12) \times 60 = 25 \text{ red beads}$$

$$60 - (24 + 25) = 11 \text{ yellow beads}$$

2. In the sale, jumpers are on the offer "buy 2, save $\frac{1}{3}$ of the price". Jeans are also currently 30% off.

Jumpers cost £45 each. Jeans cost £50.

What is the cost of buying 2 jumpers and 2 pairs of jeans?

$$\text{Jumpers: } 2 \times £45 = £90$$

$$\frac{1}{3} \text{ of } £90 = £30$$

$$£90 - £30 = £60$$

$$\text{Jeans: } 2 \times £50 = £100$$

$$(30 \div 100) \times £100 = £30$$

$$£100 - £30 = £70$$

$$\text{Total: } £60 + £70 = £130$$

3. Hats are worn by 85% of the ladies at a wedding. What percentage did not wear hats?

$$100 - 85 = 15\%$$

4. When Borghull Community Academy is full there are 150 pupils. Today, though, 30% of the pupils are away ill. How many children are in school?

$$30\% \text{ of } 150 = 45$$

$$150 - 45 = 105 \text{ children in school}$$

5. Breath of the Wild on the Nintendo Switch normally sells for £52.00 but has been reduced by 20%. What is its new cost?

$$20\% \text{ of } £52.00 = £10.40 \quad £52.00 - £10.40 = £41.60$$

