

Year 6 Maths challenge WB 30.3.20

At the local travel agents a total of £4,162 of flights to Dubai were booked.
Two adults and three children flew from London Heathrow.
Which airport did the remaining five adults fly from?

What if...

...the cost of the flights decreased by 4% for the adults but increased by 4% for the children?
Investigate which would be the cheapest option a family of 5, 2 adults and 3 children compared with the original price of the flight for each of the airports.

CARD 8

Trips to Dubai
(see below)
Flying time: 6 hrs 25 mins
Mr and Mrs Mossley want to travel to Dubai.
How much would it cost them to fly on 20th December from Manchester?

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How much would it cost them to fly to Dubai from Birmingham?
How much cheaper would it be for them to fly from Birmingham?

Three passengers in row 1 on the plane could not decide who was going to sit by the window, in the middle or by the aisle.
How many different ways could the seating plan be arranged?

Mr and Mrs Mossley want to travel to Dubai.
They could fly from Manchester or from Birmingham.
How much cheaper would it be for them to fly from Birmingham?

Departs	Date	Adult	Child
Manchester	20 Dec	£529	£432
London Heathrow	23 Dec	£346	£275
London Gat	23 Dec	£364	£282
Birmingham	20 Dec	£479	£387

It takes Mr and Mrs Mossley 2 hrs 15 mins to travel to Birmingham. They need to arrive 2 $\frac{1}{2}$ hrs before the 14:22 flight and allow 25 mins to park the car.
Mr Mossley says that if they leave the house at 8:30 they will have plenty of time and at least one hour spare time.
Is he correct?
Explain how you know.

Year 6 Maths challenge ANSWERS for WB 30.3.20

2 adults and 3 children flying
from London Heathrow = £1,517.

The total spent on flights = £4,162.

$£4,162 - £1,517 = £2,645$
 $£2,645 = 5$ adults flying
from Manchester.

Window	Middle	Aisle
a	b	c
a	c	b
b	a	c
b	c	a
c	a	b
c	b	a

6 possible arrangements.

2 adults @ £529

$2 \times 529 = £1,058$

One possible approach...

Could be for each airport:

Manchester original price:

2 adults £1,058 + 3 children £1,296 = £2,354

Amended price:

2 adults - 4% = £42.32

3 children + 4% = £51.84

An increase of £9.52 flying from Manchester,
the original option was better.

Manchester 2 adults price £1,058.

Birmingham 2 adults price $2 \times 479 = £958$.

£100 cheaper to fly
from Birmingham.

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Birmingham 2 adults price $2 \times 479 = £958$.

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5 hrs 10 mins is needed so the
latest they could leave is 9:12.

Mr and Mrs Mossley do have plenty of
time if they left at 8:30 but have less
than one hour spare.

