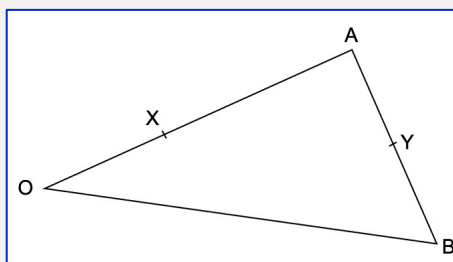


Proofs with vectors

**KING'S
MATHS
SCHOOL**

- X divides OA in the ratio 1 : 2
- Y is the mid point of AB
- What can you work out? What can you deduce?

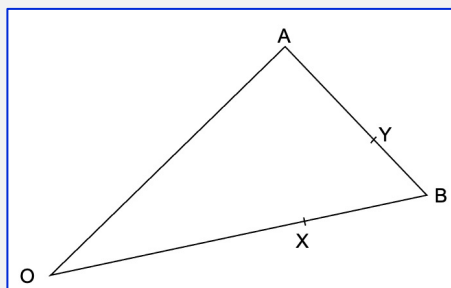


1

Proofs with vectors

**KING'S
MATHS
SCHOOL**

- X divides OB in the ratio 2 : 1
- Y divides BA in the ratio 1 : 2
- What can you work out? What can you deduce?

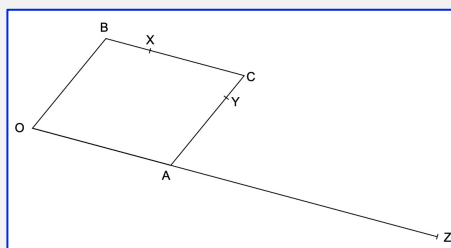


2

Proofs with vectors

**KING'S
MATHS
SCHOOL**

- X divides BC in the ratio 1 : 2
- Y divides CA in the ratio 1 : 3
- $AZ = 2 OA$
- What can you work out? What can you deduce?

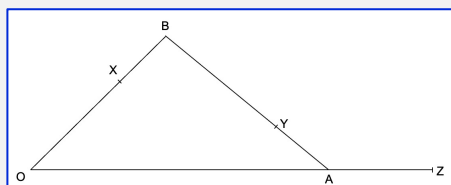


3

Proofs with vectors

**KING'S
MATHS
SCHOOL**

- $OX = \frac{5}{8} OB$
- Y divides BA in the ratio 3 : 1
- $AZ = \frac{1}{4} OA$
- What can you work out? What can you deduce?

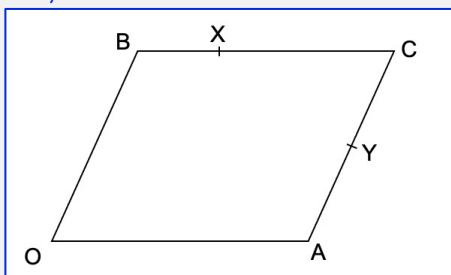


4

Proofs with vectors

**KING'S
MATHS
SCHOOL**

- X divides BC in the ratio 1 : 2
- Y is the midpoint of CA
- P is the point on XY which divides it in the ratio 4 : 3
- Q is the point on OC with $OQ = \frac{5}{7} OC$
- What can you work out?
- What can you deduce?

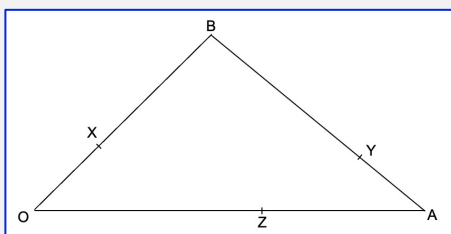


5

Proofs with vectors

**KING'S
MATHS
SCHOOL**

- $OX = \frac{1}{3} OB$
- Y divides BA in the ratio 3 : 1
- $OZ = \frac{3}{5} OA$
- What can you work out? What can you deduce?



6