Year 6: Week 4, Day 5 Quadrilaterals

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.

OR start by carefully reading through the Learning Reminders.

- Tackle the questions on the Practice Sheet. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.
- 3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?

Have I mastered the topic? A few questions to
Check your understanding.
Fold the page to hide the answers!



2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.



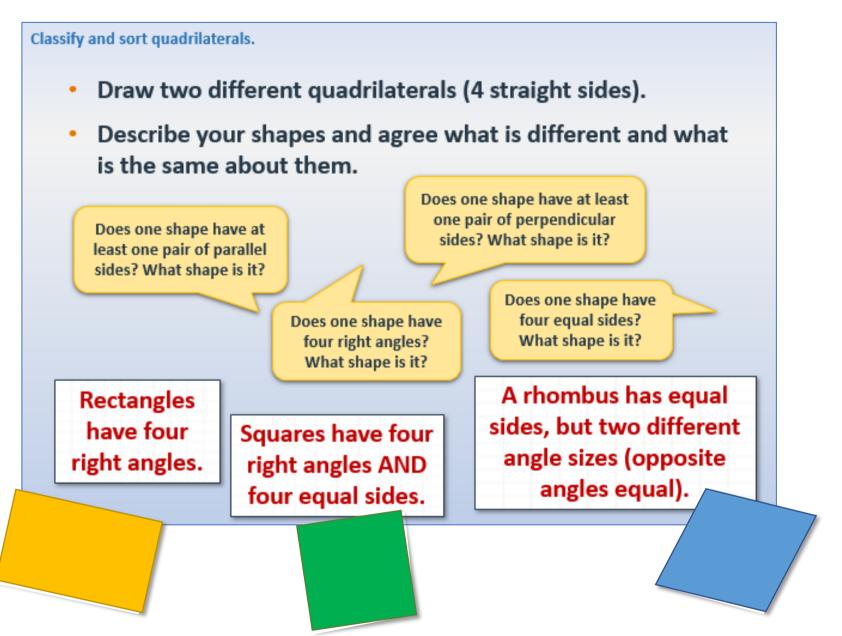


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| | |
| Iden | tify the value of the '4' in the following numbers: |
| (a) | 3.407 |
| (b) | 4.821 |
| (c) | 0.043 |
| (d) | 5.104 |
| (e) | 48,739 |
| | |
| | |
| How | many times must Dan multiply 0.048 by 10 to get 48,000? |

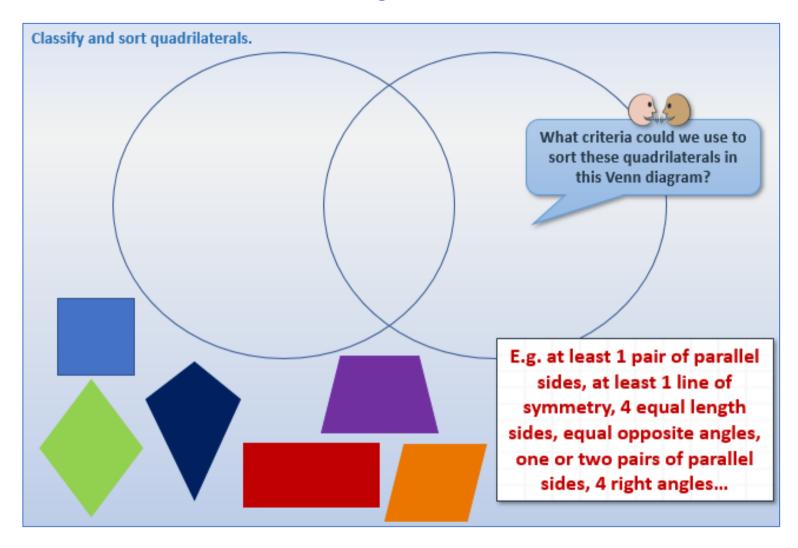
What number is one hundred times smaller than 0.4?

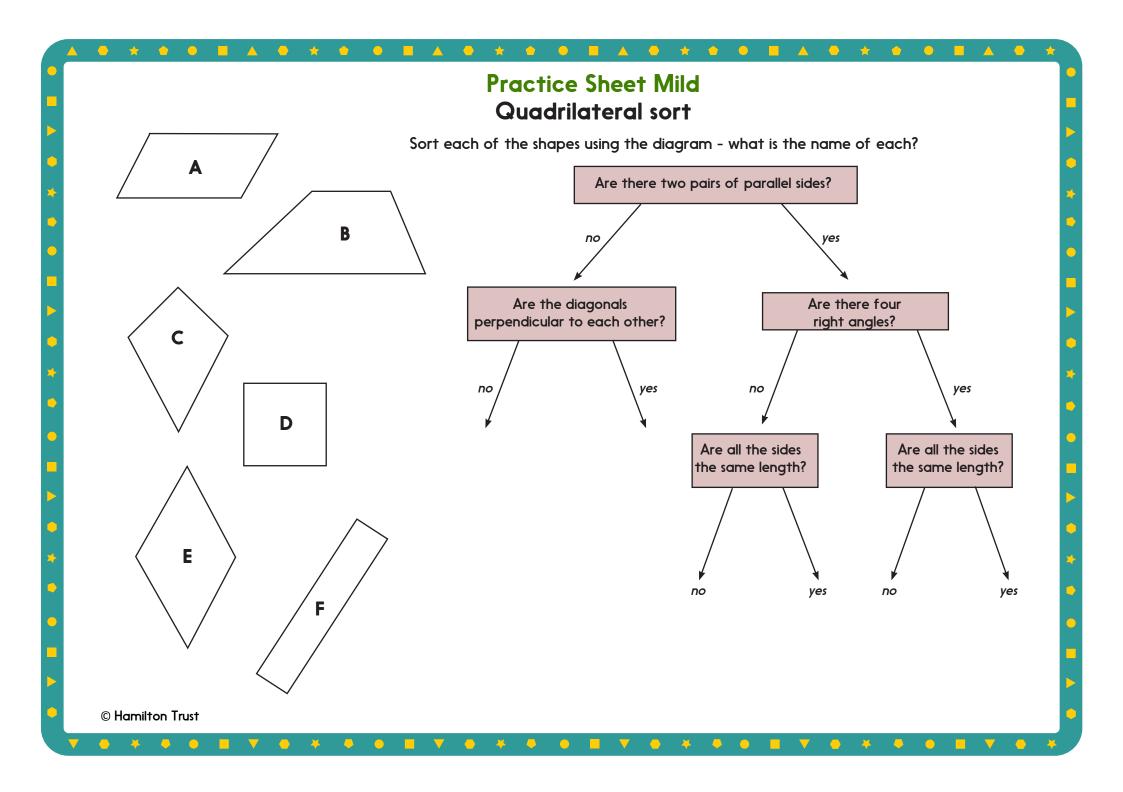


Learning Reminders



Learning Reminders







Practice Sheet Hot Quadrilateral challenge

Discuss the questions below with a partner. Write your answers in your book, and use diagrams to illustrate your answers.



Can you draw a...

- 1. Quadrilateral with exactly 3 right angles? If so can you name it?
- 2. Quadrilateral with exactly 2 right angles? If so can you name it?
- 3. Symmetrical quadrilateral with exactly 1 right angle? If so can you name it?
- 4. Quadrilateral with exactly 3 equal sides? If so can you name it?
- 5. Quadrilateral with no right angles and two pairs of equal sides that are next to each other. If so, can you name it?
- 6. Quadrilateral with two pairs of opposite equal sides and no right angles. If so can you name it?
- 7. Trapezium with no lines of symmetry.
- 8. A quadrilateral with no equal sides or angles.

Challenge

Does the quadrilateral you drew in (8) tesselate?

Tesselate means that repeated copies of it fit together with no gaps.

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Practice Sheets Answers

Quadrilateral sort (mild)

A = Parallelogram

- B = Trapezoid
- C = Kite
- D = Square
- E = Rhombus

Quadrilateral challenge (hot)

- 1. No quadrilateral can have exactly 3 right angles. Exactly 2 are possible (see Q2), as are exactly 4, but not 3.
- 2. Shapes created will either be a form of trapezium, or a kite, or an irregular quadrilateral.
- 3. Kite
- 4. Isosceles trapezium or irregular quadrilateral, e.g.

 \triangle

 \bigcirc

- 5. Kite
- 6. Parallelogram
- 7. Yes, various examples may be drawn
- 8. Yes, various examples may be drawn

A Bit Stuck? What's special?

Things you will need:

- A sheet of quadrilaterals
- Scissors
- \cdot Ruler
- Right angle measurer (you could use the corner of a sheet of paper or a book)
- A Carroll diagram sheet
- Glue stick
- A pencil

What to do:

- 1. Cut out the quadrilaterals.
- 2. Take one and discuss where it belongs on the diagram.
- 3. Once you are agreed, stick it in the correct place on the sheet.
- 4. Repeat with each quadrilateral, one at a time.

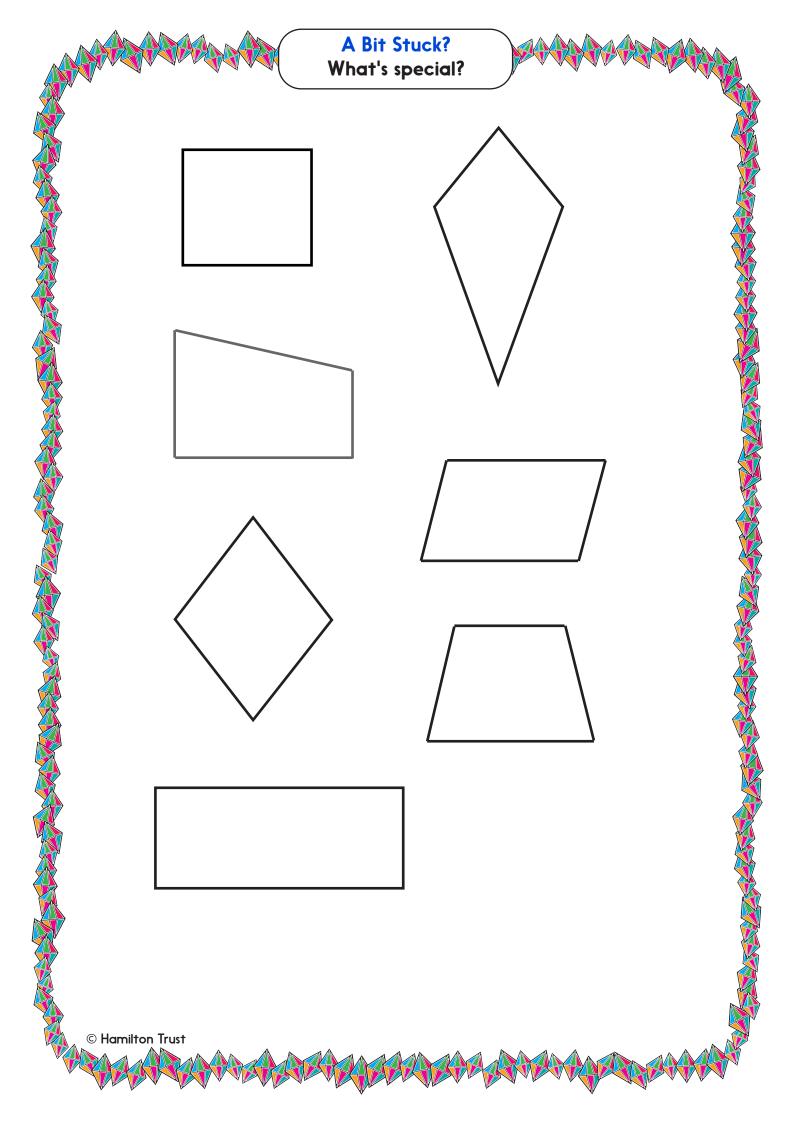
S-t-r-e-t-c-h:

Choose a different way to sort the quadrilaterals.

Learning outcomes:

- I can identify and describe properties of quadrilaterals.
- I can sort quadrilaterals according to their properties.
- I am beginning to find my own way to sort quadrilaterals.

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A Bit Stuck? What's special?



| | Symmetrical | Not symmetrical | |
|--------------|-------------|-----------------|---|
| Has a right | | | |
| angle | | | |
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Check your understanding Questions

Mystery quadrilaterals

- I have one pair of non-equal parallel sides. What am I?
- I have two pairs of equal sides, but no sides are parallel. Two opposite angles are equal but not the other two. What am I?
- I have four equal sides but no right angles. What am I?
- I have two pairs of parallel sides and no right angles. What am I?

Fold here to hide answers

Check your understanding Answers

Mystery quadrilaterals

- I have one pair of non-equal parallel sides. What am I? A trapezium.
- I have two pairs of equal sides, but no sides are parallel. Two opposite angles are equal but not the other two. What am I? A kite.
- I have four equal sides but no right angles. What am I? A rhombus.
- I have two pairs of parallel sides and no right angles. What am I? A parallelogram.

Children will find it helpful to sketch the shapes in questions like these.