

Aspects of Desmos

teacher.desmos.com

Teacher portal

Find and set activities

Monitor progress and provide
feedback

Create own activities

Account creation required (can
use Google)

student.desmos.com

Student portal

Complete activities
individually or paired (e.g.
Polygraph)

No account needed

Other Desmos services

learn.desmos.com

Graphing calculator help

Creating activities
walkthrough

CPD

Desmos pre-made
'Polygraph'

Hey, students!

Go to student.desmos.com
and type in:

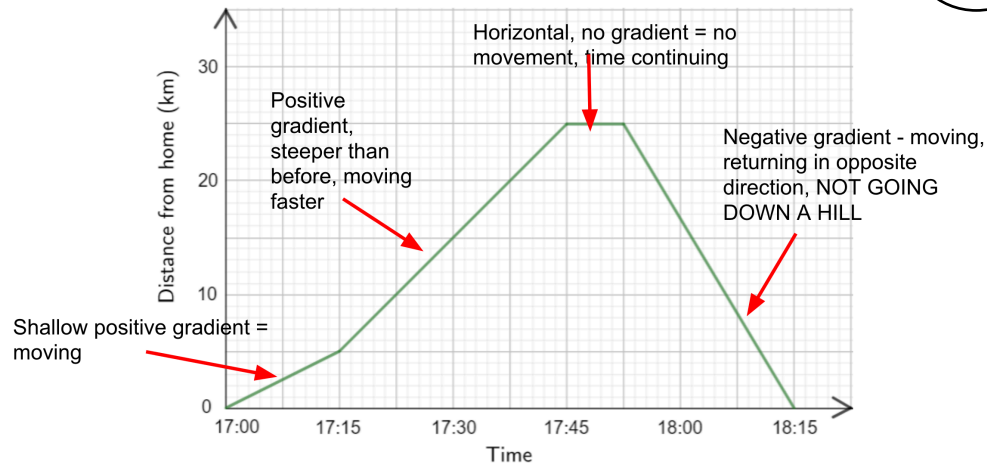
WMX CG7

You can also share this link with your students:

<https://student.desmos.com/?prepopulateCode=wmxcg7>

A few things to recap.....

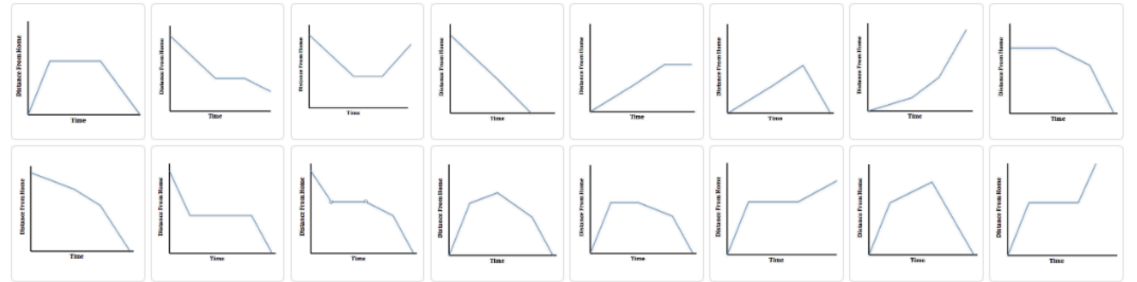
1



2

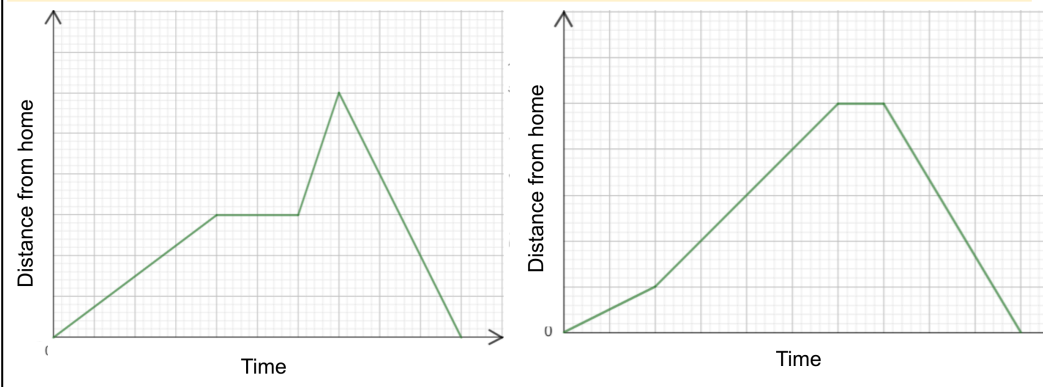
Here are the cards you will get.

Think about some of the differences between them. What questions could you ask to eliminate some of them?



3

What question could you ask to tell the difference between these two graphs?



4

Task 1 - Polygraph (guess the card)

Hey, students!

Go to student.desmos.com and type in:

83E ZN2

If I pause your screen, please go to the next task

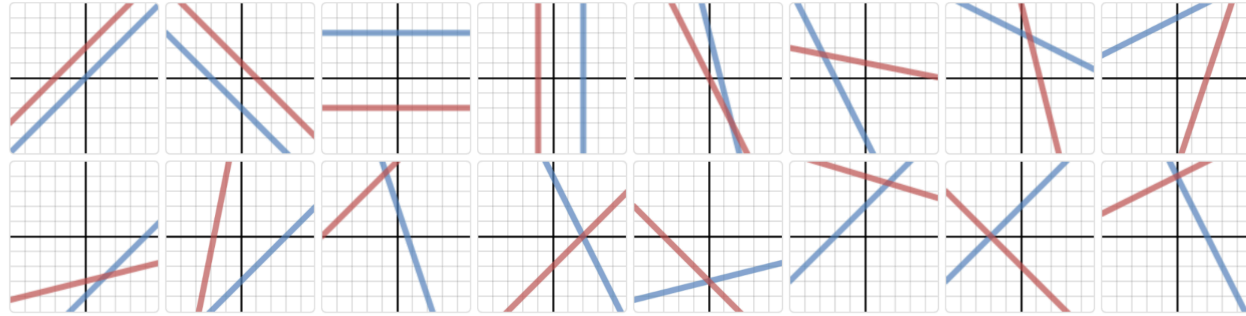
1

Here are some cards. Each card is slightly different.

On each card, there are two lines which will be represented with different equations.

Think of 3 groups that you could sort the cards into

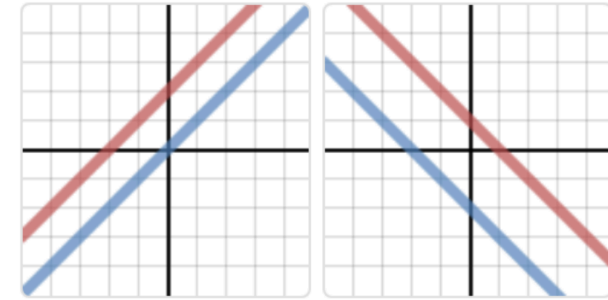
The Cards



2

What question could you ask to tell the difference between these cards?

Think about all the the keywords we have used in the topic so far.....



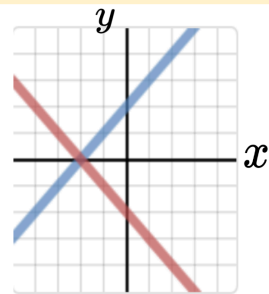
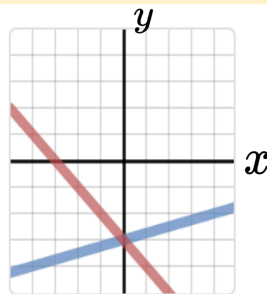
3

The red and blue lines both have equations.

If the lines cross, it tells us that, at that point, they have one solution for x and y .

This is just like the work on simultaneous equations we have been doing.

So.... what question could you ask, relating to the solution, to tell these two cards apart?

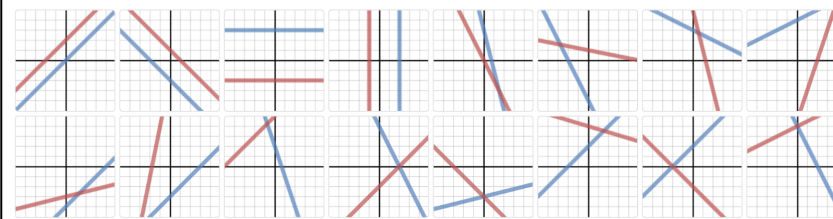


4

Go to student.desmos.com
and type in:

JKW 8CY

The Cards



Vocabulary

- Gradient
- Parallel
- Solution
- Positive / Negative
- Quadrant
- Horizontal / Vertical
- Intersect

Examples of Desmos 'conversations'

Jack Wilcock

8 STUDENTS JKW8CY

0 ✓ 0 ✗
1 ✓ 0 ✗
1 ✓ 0 ✗
1 ✓ 1 ✗
1 ✓ 0 ✗

waiting for a partner
waiting for a partner

0 ✓ 1 ✗

Anonymize Pause Class

[Learn more](#) about our conversation toolkit!

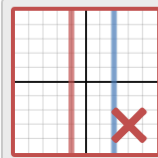
Polygraph

QUESTIONS

1 Ask a question to help you figure out the difference between these two cards.

Choose two cards that would be hard to tell the difference between with only one question.

ALL GAMES



PICKER

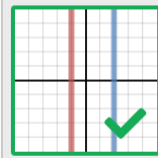
positive
parallel
Vertical

2:14 pm



Hmmm which George. Anyway, do your lines intersect?
If the lines carried on, would they eventually intersect?
Do they both cross the y axis?
Negative gradient?

2:12 pm



does the red line stay in one quarter?
does the red line stay in the top 2 quarters
do the lines go straight down

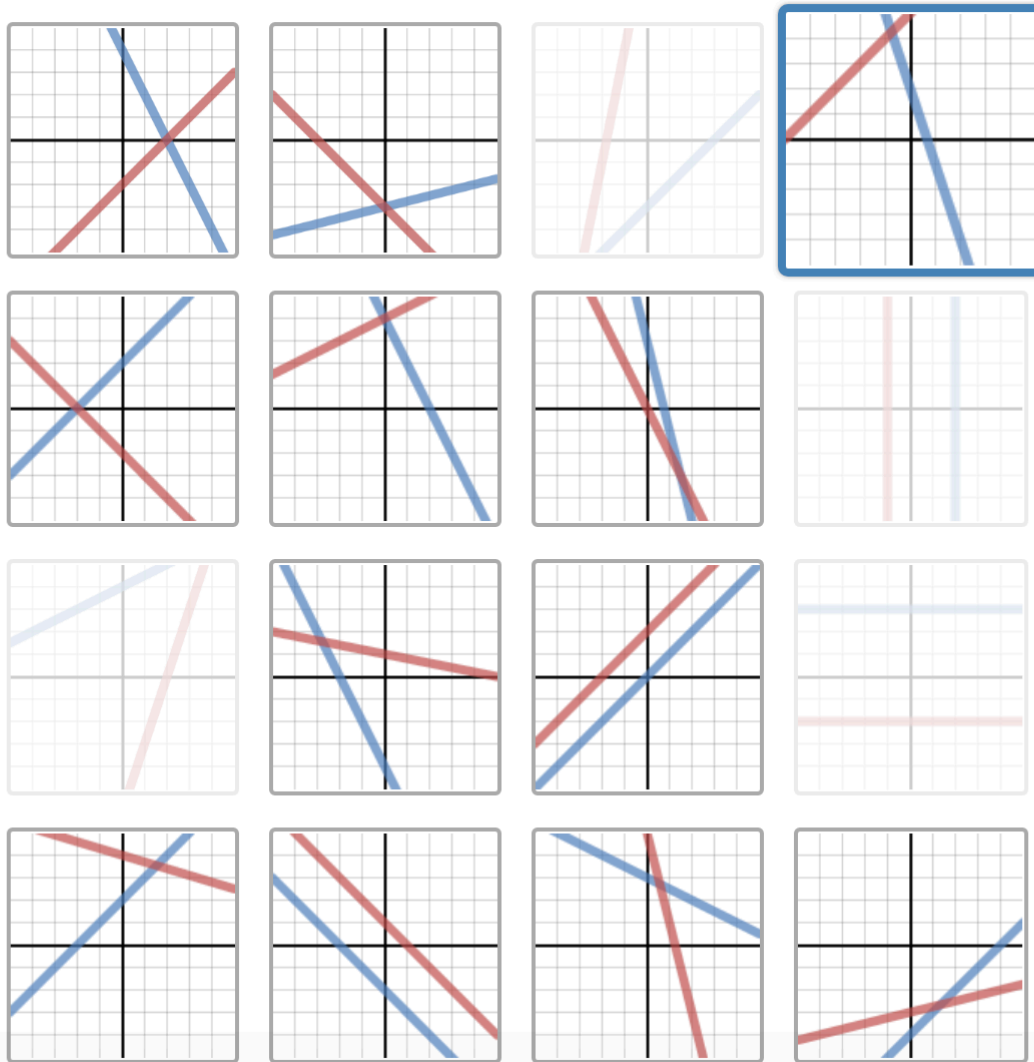
2:11 pm



Hi. Are you line horizontal?
Do your lines cross together at any point?
Does at least one of your lines go across the $y=0$ axis at one point?

2:10 pm

Examples of Desmos 'conversations'



Questions Asked: 2

Your Partner: [Redacted]

YOUR PARTNER ASKED

Hey sir!Are you ready for maths??

YOU CHOSE

Yes

YOUR PARTNER DIDN'T ELIMINATE ANY GRAPHS

YOUR PARTNER ASKED

Firstly,do the line intersect?

YOU CHOSE

Yes

YOUR PARTNER ELIMINATED



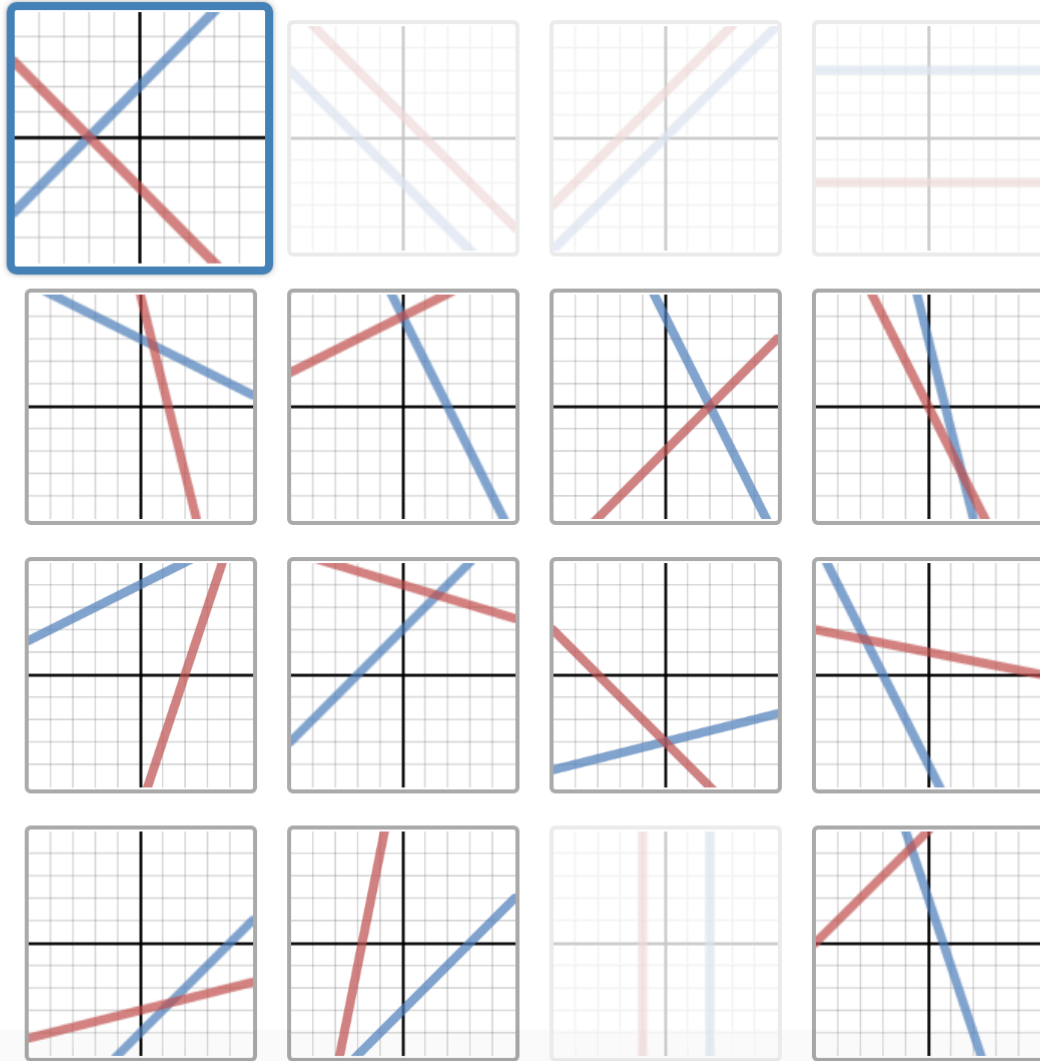
YOUR PARTNER IS TYPING:

Do th

Examples of Desmos 'conversations'



Questions Asked: 4



Your Partner: [Redacted]

YOUR PARTNER DIDN'T ELIMINATE ANY GRAPHS

YOUR PARTNER ASKED
positive gradient

YOU CHOSE
I Don't Know

YOUR PARTNER DIDN'T ELIMINATE ANY GRAPHS

YOUR PARTNER ASKED
parallel

YOU CHOSE
No

YOUR PARTNER ELIMINATED
[X] [X] [X] [X]

YOUR PARTNER ASKED
is the red in more than one box

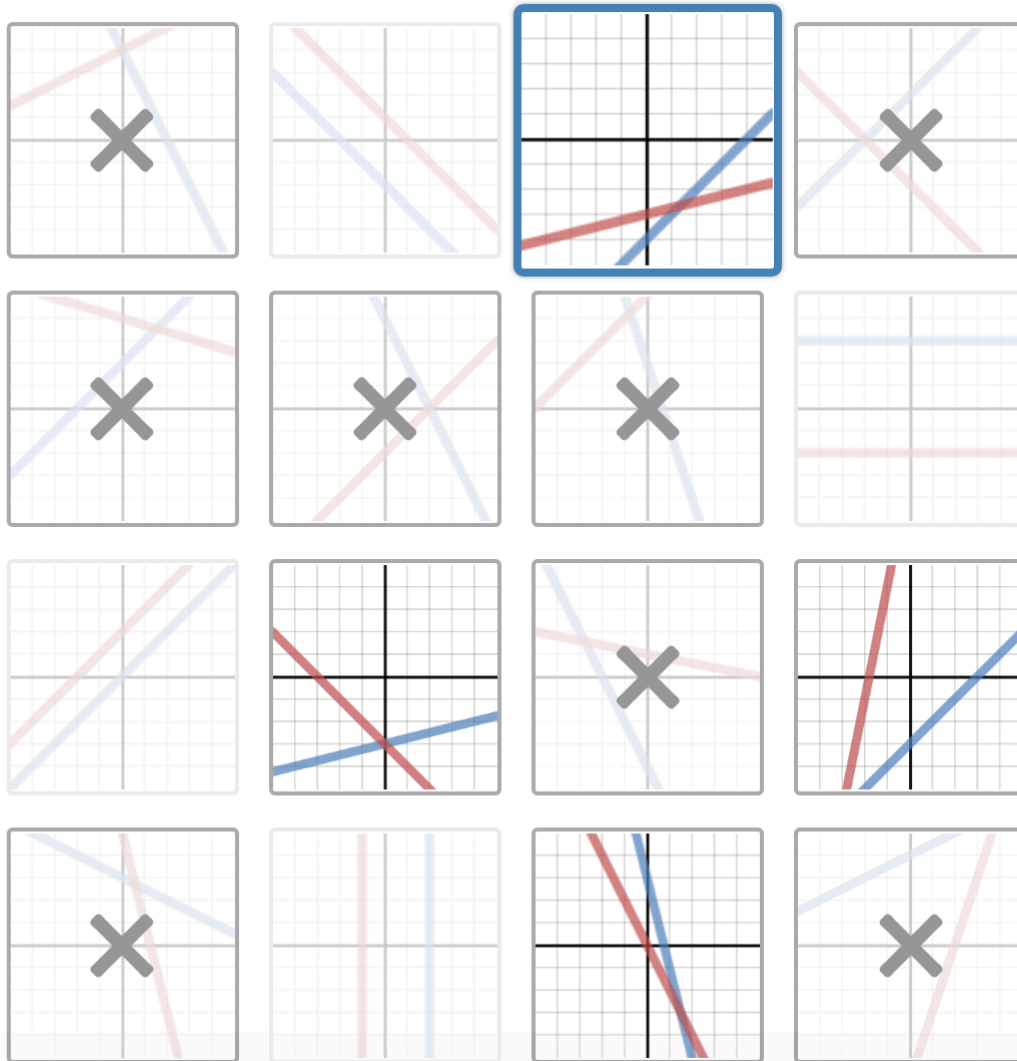
YOU CHOSE
Yes

Watch your partner eliminate graphs based on this information.

Examples of Desmos 'conversations'



Questions Asked: 3



Your Partner: [Redacted]

sorry my bad i thought you meant do they intersect at all but i know where i went wrong now

YOU CHOSE

YOUR PARTNER DIDN'T ELIMINATE ANY GRAPHS

YOUR PARTNER ASKED
are they a set of parallel lines

YOU CHOSE

YOUR PARTNER ELIMINATED

YOUR PARTNER ASKED
do they intersect above or in line with the x axis?

YOU CHOSE

Watch your partner eliminate graphs based on this information.

Desmos 'custom' options

desmos

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Jack Wilcock ▾

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Polygraph: Inequalities on Number Lines

Created by you

This Polygraph aims to encourage pupils to use vocabulary such as inequalities, greater than/less than, equal to, range, open/closed, inclusive, exclude, unknown, maximum, minimum



Hey, students!

Go to student.desmos.com
and type in:

ZDK B7F