

FDP LOOPS

$\frac{3}{10}$	10%	$\frac{1}{10}$
30%		$\frac{3}{4}$
$\frac{9}{10}$	90%	75%

The aim is to make square domino loops, like the one in the picture, from 4 dominoes matching the fractions, decimals and percentages. Start with any domino and find 2 other dominoes to match the ends of the first domino.

For example, the [$\frac{3}{10}$ and 10%] domino matches with 30% at one end and $\frac{1}{10}$ at the other end.

Then $\frac{9}{10}$ matches with 90% and $\frac{3}{4}$ with 75% to complete the square.

This uses 4 of the dominoes below.

Cut out these 16 dominoes.

Can you use all 16 dominoes to make 4 domino loops?

Note that in some countries the decimal point is written as a decimal comma, for example

0·6, 0.6 or 0,6

0·3	20%	$\frac{9}{10}$	30%	0·6̇	$\frac{1}{4}$	0·8	$33\frac{1}{3}\%$
0·8	25%	$\frac{1}{2}$	40%	$\frac{1}{3}$	50%	$\frac{1}{10}$	$\frac{3}{4}$
$\frac{1}{5}$	$66\frac{2}{3}\%$	$\frac{1}{4}$	0·5	75%	90%	$\frac{3}{5}$	80%
0·4	$\frac{4}{5}$	$\frac{3}{10}$	10%	50%	0·6	0·25	30%

HELP

You might find it easier to match the dominoes in one long line, and then to break the line into four to make four loops, or break it into two to make two doughnuts, or join the line into one circle.

NEXT

The dominoes can also be arranged into a pair of loops or into one long loop. Create these shapes.

Create your own domino puzzles.

RULES FOR THE FDP LOOPS GAME - FOR TEAMS OF FOUR

- Each team must have a set of 16 dominoes shared randomly so each member of the team starts with four dominoes in front of them.
- Players must help one another complete their FDP Loop by passing dominoes to other team members.
- They must not talk to other members of the team or give non-verbal signals (such as pointing at a domino they want).
- The dominoes in front of each person should be visible to everyone.
- Team members can only give dominoes, not take dominoes from someone else.
- Each team member must have at least two dominoes in front of them at all times.

ROLE OF OBSERVERS

Observers should check that the teams obey the rules and also keep a record of when members of the team help someone else (rather than, for example, when they just pass a piece on without looking at what the other person actually needs).

0.3	20%
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$\frac{9}{10}$	30%
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FDP LOOPS GAME

The winning team is the first team to make all 4 FDP loops.

0.8	25%
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$\frac{1}{2}$	40%
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$\frac{1}{5}$	$66\frac{2}{3}\%$
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$\frac{1}{4}$	0.5
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0.4	$\frac{4}{5}$
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$\frac{3}{10}$	10%
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$0.\dot{6}$	$\frac{1}{4}$
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0.8	$33\frac{1}{3}\%$
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$\frac{1}{3}$	50%
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$\frac{1}{10}$	$\frac{3}{4}$
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75%	90%
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$\frac{3}{5}$	80%
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50%	0.6
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0.25	30%
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