Venn Diagram Challenges
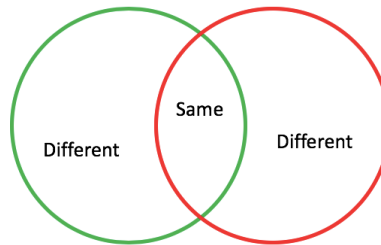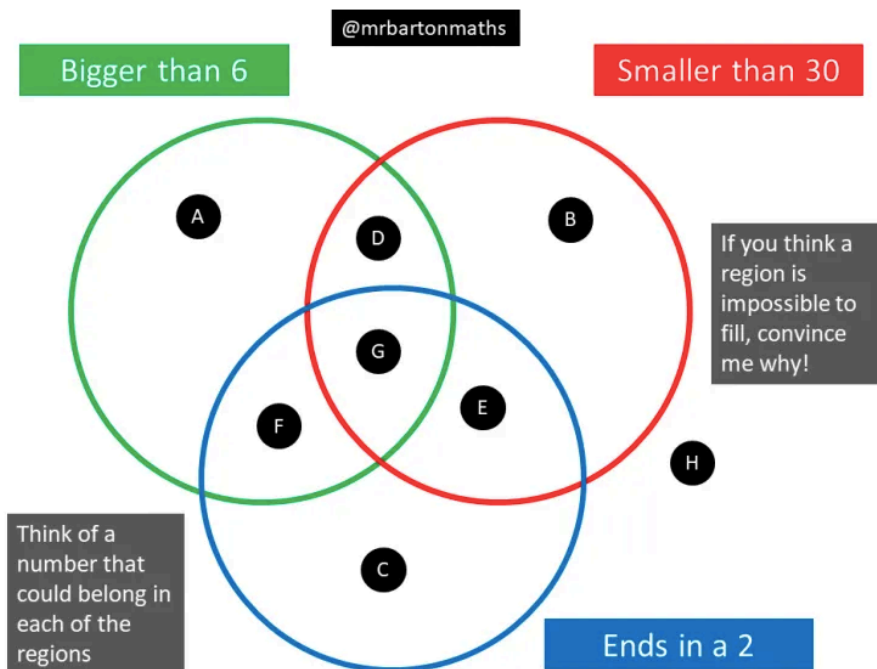

A Venn diagram is an illustration of the relationships among groups of objects. Each circle contains all the elements of a group. The Venn diagram helps us identify similarities between two or more groups (shown where they overlap) and differences (where they do not overlap). Try these Venn diagram challenges from Craig Barton's mathsvenns.com website.

For each Venn diagram, try to find at least one number that could fit in each of the regions in the diagram (labeled with letters A – H). How many numbers can you find for each region? Which regions in a diagram contain more numbers than others? Why? If you think there are no numbers that could fit in a region, explain why it is impossible.
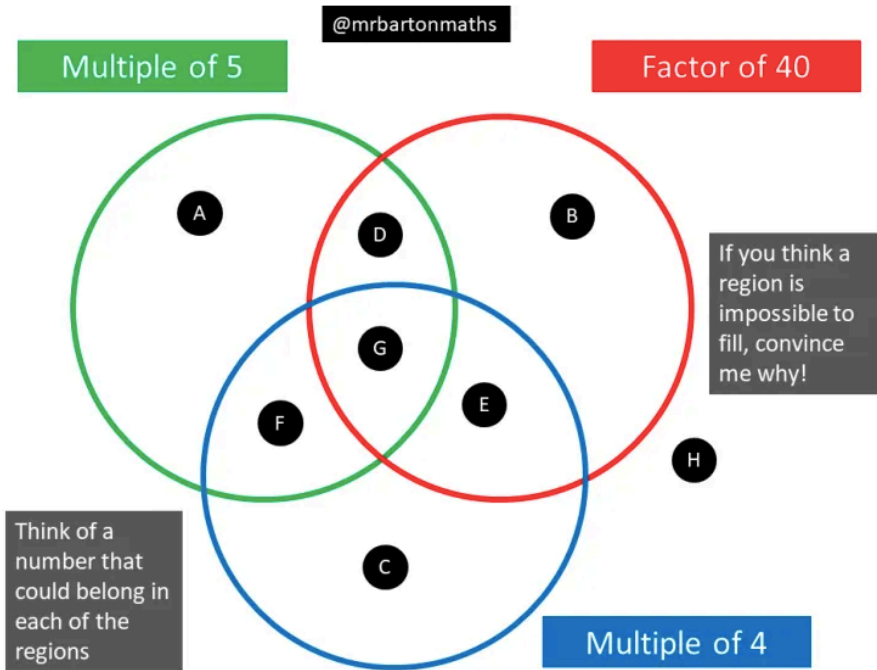
a)

Solutions & Explanations: (More challenges on the next pages. Try one or try them all!)
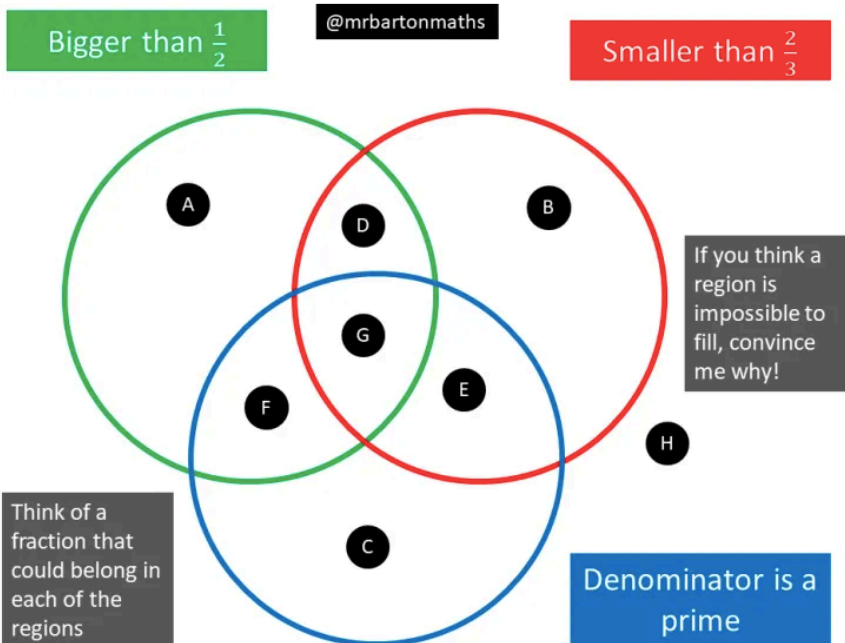
Name _____   Class _____

(First and last name, please!)   Solutions due: April 10th

b)

Multiple of 5

Factor of 40

A

D

B

G

F

E

H

If you think a region is impossible to fill, convince me why!

C

Think of a number that could belong in each of the regions

Multiple of 4

c)

Bigger than $\frac{1}{2}$

Smaller than $\frac{2}{3}$

A

D

B

G

F

E

H

If you think a region is impossible to fill, convince me why!

C

Think of a fraction that could belong in each of the regions

Denominator is a prime

d) Use the blank templates below to make your own Venn diagram challenges!

A

D

B

G

E

F

H

C

A

D

B

G

E

F

H

C