**W1D4 Solution**

***Question 3.***

Find the sum: 1/2 + 2/4 + 3/8 + 4/16 + 5/32 + … Hint: S = 1/2 + 2/4 + 3/8 + 4/16 + 5/32 + … S/2 = 1/4 + 2/8 + 3/16 + 4/32 + … S – S/2 = 1/2 + 1/4 + 1/8 + 1/16 + 1/32 + …

Hint:

S = 1/2 + 2/4 + 3/8 + 4/16 + 5/32 + …

S/2 = 1/4 + 2/8 + 3/16 + 4/32 + …

S – S/2 = 1/2 + 1/4 + 1/8 + 1/16 + 1/32 + …

***Answer:***

S/2 = 1/(1-1/2)

Using:

Text

Description automatically generated with low confidence

S/2 = 1/(1/2)

S/2 = 2

S = 4