Rapid fire

1) If the probability of a head in a coin toss is $\frac{7}{13}$ (.7 is a bad coin). What is the probability of a tail?

2) For the above coin, what is the probability of getting 2 heads in two consecutive coin tosses?

3) For the above coin, what is the probability of getting a head and a tail. in two tosses of the above coin?

4) True or false?

a) $3 - x(x-2) = (3-x) + (x-2)$

b) $5 - x(1-x) = x^2 + 6$

c) $\frac{(x+1)}{2x} = \frac{1}{2} + \frac{1}{x}$

d) $\frac{(1-x) - 2(x-1)}{x-1} = -3$

e) $|x-5| = |5-x|$

f) $5 - |x-5| = |x|$

g) $5 - |x-5| = 10 + |x|$

h) $|x| = x$ for all +ve values of x

i) $\sqrt{3000} = 10\sqrt{30}$

j) $\frac{3^5}{3^{-2}} = 3^7$

k) $\frac{30\sqrt{3}}{10} = 3\sqrt{3}$

l) $\frac{30}{\sqrt{3}} = 10\sqrt{3}$

5) $6^2+6^3 = 6^5$

6) $6^2 \cdot 6^3 = 6^5$

7) $(6^2)^3 = 6^5$

8) $(6^2)^3 = 6^6$

9) $6^2 \cdot 6^3 = 6^6$

10) $6^2 \times \sqrt{6^6} = 6^2 \times 6^3$

11) $6^2\sqrt{6^6} = 6^2 \times \dfrac{6^6}{\sqrt{6^6}}$

12) $6^2 = 2^6$

13) $(6 \cdot 6)^2 = 6^2 \times 6^2$

14) $(6^2 \cdot 6)^2 = 6^6$

15) $\dfrac{6^2}{\sqrt{6}} = 6^{1.5}$

16) $\dfrac{6^2}{\sqrt{6}} = \sqrt{\dfrac{6}{6}}$