Negatives Review

1) Evaluate

a) $(-2)^2$ b) $(-4)^3$ c) $(-1)^{11}$

d) $-3 \times 4 - 5 \times -6$ e) $-5 + 3 \times -4$ f) $-2 \times (-4)^2$

g) -0.2×0.03 h) -80×-0.4 i) $(-0.3)^2 \times -1.2$

2) Solve the following to find x

a) $\frac{x}{3} = -7$ b) $\frac{x}{4} + 11 = 4$ c) $\frac{x}{-6} + 7 = 2$

3) Find the value of the following expression if $a = -5, \quad b = -3, \quad c = 8$

a) $4b$ b) bc c) b^2 d) $ab + 2a$

e) $c + a^2$ f) $(ab + c)^2$ g) $2(a - c)^2$

4) Find the missing terms in the geometric sequences
(where the term to term rule is a multiplication)

a) -3, -6, -12, -24, ?, ?, … b) 4, -12, 36, ?, …

c) ?, -3, 1.5, -0.75, … d) 8, ?, ?, -8000, …

5) Simplify

a) $-3x \times 4x$ b) $-6x \times -4xy$ c) $(-4x)^3$

6) There are fourteen statements below.
Each one is either always true, always false or iffy (sometimes true but sometimes false)
Decide which are which.

A When you add two negative numbers, the answer is positive.	B The sum of two numbers is always greater than their difference.
C Two negatives make a positive.	D If n is negative, then $\frac{1}{n}$ is less than $^-1$.
E When you add two negative numbers, the answer is negative.	F The product of two negative numbers is positive.
G Subtracting one negative number from another negative number gives a positive answer.	H When you add two numbers the total is greater than 0.
I When you add, you move to the right along the number line.	J If $a>b$, then $^-a>^-b$.
K Subtracting a positive number is the same as adding a negative number.	L The sum of a positive number and a negative number is negative.
M Adding a negative number is the same as subtracting a positive number.	N When you divide a positive number by a negative number the answer is positive.

Answers

1a) 4 b) -64 c) -1 d) 18 e) -17 f) -32 g) -0.006 h) 32 i) -0.108 2a) -21 b) -28 c) 30

3a) -12 b) -24 c) 9 d) 9 e) 33 f) 529 g) 338 4a) -48, -96 b) -108 c) 6 d) -80, 800

5a) $-12x$ b) $24x^2y$ c) $-64x^3$