

Lighthouse 6 (Checkpoint 1)

1. Complete this times table grid

X	-8a	6b	+5c
5e			
-9f			
7a			

2. Simplify $35ab^2 \div 5a^3b$

3. Round 0.00345 to

a) 1 sf b) 2 sf

4. Write as a normal number

a) 3.1×10^{-4} b) 4.23×10^6



3a

a + 4

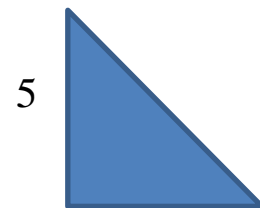
5. In a 20% off sale a hat costs £16. What was the price originally?

6. What is the value of a if the area of the rectangle is 420 cm^2 ?

7. A polygon's interior angles sum to 1080. How many sides does it have?

8. Q(2, 5) and R(8, 23) are the ends of a line segment
Find the equation of the line.

9. Solve $3x + 2y = 19$
 $5x - 3y = 38$



10. Find the missing side length
leave your answer as a surd (e.g. $\sqrt{51}$)

11. There are 5 reds and 3 green counters in a bag. I take one counter, put it back in the bag, and take another. What is the probability the two counters are the same colour?

12. Factorise a) $a^2 - 3a - 18$ b) $a^2 - 9$