

Lighthouse 6 (Checkpoint 3)

1. Complete this times table grid

X	-9a	4b	+7c
8e			
-6f			
3a			

2. Simplify $48a^2b^3 \div 4ab$

3. Round 0.00782 to

a) 1 sf b) 2 sf

4. Write as a normal number

a) 3.1×10^{-4} b) 5.03×10^6



2a

a + 5

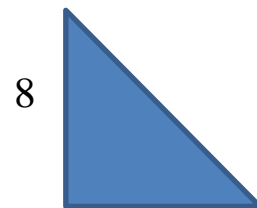
5. In a 30% off sale a hat costs £42. What was the price originally?

6. What is the value of a if the area of the rectangle is 168 cm^2 ?

7. A polygon's interior angles sum to 2160. How many sides does it have?

8. Q(3, 7) and R(6, 22) are the ends of a line segment
Find the equation of the line.

9. Solve $6x + 2y = 38$
 $4x - y = 16$



8

5

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

11. There are 3 reds and 9 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) $a^2 + 4a - 12$ b) $a^2 - 49$