

Lighthouse 6 (Checkpoint 6)

1. Complete this times table grid

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

2. Simplify $24ab^3 \div 3a^2b^4$

3. Round 0.00538 to

a) 1 sf b) 2 sf

4. Write as a normal number

a) 9.2×10^{-3} b) 7.04×10^6



4a

a + 3

5. In a 20% off sale a hat costs £64. What was the price originally?

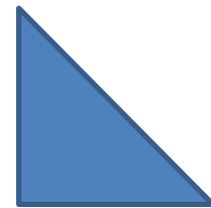
6. What is the value of a if the area of the rectangle is 432 cm^2 ?

7. A polygon's interior angles sum to 720. How many sides does it have?

8. Q(-2, 5) and R(2, 33) are the ends of a line segment
Find the equation of the line.

9. Solve $6x + y = 39$
 $5x - 2y = 41$

8



7

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

11. There are 9 reds and 6 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) $a^2 - 2a - 63$ b) $a^2 - 196$