

Lighthouse 6 (Checkpoint 5)

1. Complete this times table grid

X	-6a	9b	+4c
5e			
-7f			
8a			

2. Simplify $36a^2b^3 \div 9a^2b^2$

3. Round 0.00679 to

a) 1 sf b) 2 sf

4. Write as a normal number

a) 8.9×10^{-5} b) 6.23×10^7



5a

a + 2

5. In a 10% off sale a hat costs £63. What was the price originally?

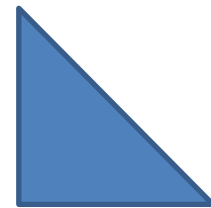
6. What is the value of a if the area of the rectangle is 315 cm^2 ?

7. A polygon's interior angles sum to 1620. How many sides does it have?

8. Q(-1, 3) and R(6, 17) are the ends of a line segment
Find the equation of the line.

9. Solve $5x + 3y = 37$
 $3x - 2y = 26$

7



6

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

11. There are 5 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) $a^2 - 3a - 40$

b) $a^2 - 81$