

## Lighthouse 6 (Checkpoint 1)

1. Complete this times table grid

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

[LL video](#)

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

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3. Round 0.00345 to

[LL video 1](#)

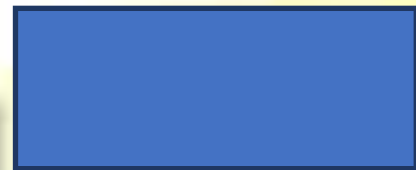
[LL video 2](#)

a) 1 sf      b) 2 sf

4. Write as a normal number

a)  $3.1 \times 10^{-4}$       b)  $4.23 \times 10^6$

[LL video](#)



$a + 4$

$3a$

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

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6. What is the value of a if the area of the rectangle is  $420 \text{ cm}^2$ ?

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

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

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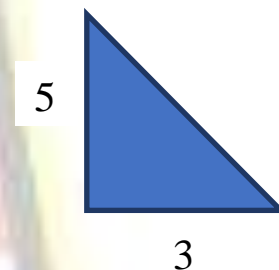
9. Solve  $3x + 2y = 19$   
 $5x - 3y = 38$

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10. Find the missing side length

leave your answer as a surd (e.g.  $\sqrt{51}$ )

[LL video](#)



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?

[CM 252](#)

[CM249](#)

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

[CM118](#)

[CM120](#)